

A TECHNICAL JOURNAL, DEVOTED TO THE ART OF PRINTING.

Vol. II.-No. 4.

CHICAGO, JANUARY, 1885.

TERMS: \\ \frac{\$1.50}{\text{Single copies, 15 cents.}}

Written for THE INLAND PRINTER.

THE PRINTING-PRESS.

(Continued.)

BY STEPHEN MC NAMARA.

OENIG launched his ideal upon the sea of public opinion with but his brain for a compass and his intuitive genius for a helm. To pilot his craft clear of mechanical bars and shoals was enough to keep him on the look-out constantly, and when added to these were the still greater difficulties of prejudice and doubt which he was obliged to avoid, alone and single-handed, with no words of encouragement or sympathy, besieged at every turn by creditors, harrassed at every point by designing men, who would delight to see him fail, the wonder is he was not distracted. He had quadrupled the product of the hand press, but it was done at a tremendous outlay, so much so, in fact, that those who were to be benefited, shrank from such an investment.

True, he had produced a new method of printing, but he had not convinced the public of the success of his experiment, nor had he as yet reached such a point as to induce others to improve upon his method. This fact clearly shows how much depended upon him, and him alone; to improve upon his model seems to us but a simple matter, and had he the means or encouragement, no doubt many radical improvements would soon suggest themselves to him.

In his first press Koenig had dispensed with the laborious pulling as well as beating in of the ink, and accelerated the speed, but not sufficient to justify the necessary expenditure, nor, so long as leather rollers were used — and which being driven in one direction only by the side gearing, already shown, and rolling the type singly—could the printing be such as to encourage the hope of ultimate success. In this dilemma he had either to improve the quality or increase the quantity of the work produced. Chemistry for inking the type, or mechanics for improving the press.

As we plow the field to increase the harvest there may lie beneath the soil we cultivate rich deposits of hidden wealth. Thus while his mind was directed toward perfecting the machinery of the press, he was unconscious of the rich and priceless gem within his reach; for, as previously mentioned, the potters were using the glue and molasses

composition for similar purposes, and this would, had it been used, tend to remove a serious hindrance to success.

To those conversant with the hand-press it will be at once apparent that to "point" eight hundred sheets per hour is about all one person could accomplish, and as no other method was then known, that was the limit in that direction, hence the next step was to increase the number of feeders, to do which would necessitate an additional cylinder. This, by utilizing the return stroke of the bed, was expected to double the capacity of the press, or bring the speed up to sixteen hundred per hour. In practice, however, eleven hundred was the limit reached, as the extra sweep of the bed prevented a greater velocity.

Fortunately he had obtained the assistance of a fellow countryman named Bauer, who was not only a finished machinist, but proved a most devoted friend. Working harmoniously together, many improvements were made, and shortly a new press was constructed, upon which was printed "Clarkson's Life of Penn," and in March, 1813, it was estimated one hundred and sixty thousand copies of various works were in the hands of the public which had been produced by Koenig's process at an average speed of eight hundred per hour.

This fact aroused such opposition as to become unbearable, and Koenig was threatened with death, and his presses with destruction by the printers. Announcements were published that he had sold his interest in the press and had fled the country, while in fact he had taken refuge from the storm by secluding himself in a German monastery. Through all his trials his partners, Bensley and Taylor, stood by him, and on his return commenced the construction of two double cylinders for Mr. Walters, of the London *Times*.

The single presses rolled the form in one direction only; this was improved by rolling the form both ways, and also changing the feed of the fountain. The sheet had at first been "pointed" directly on the tympan, and this was improved by an open feed board, similar to the present fly. A series of endless tapes passed down this board, and a drop roller carried the sheet on to the cylinder by engaging the edge, the table with the points being lowered in exact time. It will be noticed that this drop roller and the tapes driving it acted in place of the nippers

at present in use, and as these tapes were outside or over the sheet, of course that part of the tape next the cylinder moved in the same direction while the other part moved in the opposite; by this means the sheet was held to the cylinder, and, defective as it was, some ten years elapsed before the simple fingered rod was invented to take its place. Racks were placed at either side of the bed to insure register, but the nipper motion seems to have been overlooked.

Mr. Walters had set his heart upon a steam press for *The Times*, and with a will of iron and the energy of an equinoctial tempest which no opposition could thwart, called to his aid the two humble but dauntless Germans and bade them build the machine under lock and key, and as Gutenberg swore his assistants to secrecy, so every one of the

twenty-two workmen who formed the "mystic crew" were obliged to sign a bond. Piece by piece the press was taken at intervals, to allay suspicions, to a house adjacent to the office of the paper, likewise a steam engine. Each part was carefully put

showing them the paper, better printed than was their custom, informed them that machine printing was an accomplished fact, as the following editorial announcement shows:—

"Our journal of this day presents to the public the practical result of the greatest improvement connected with printing since the discovery of the art itself. The reader of this paragraph now holds in his hand one of the many thousand impressions of The Times newspaper which were taken off last night by a mechanical apparatus. A system of machinery almost organic has been devised and arranged, which, while it relieves the human frame from its most laborious efforts in printing, far exceeds all human powers in rapidity and dispatch. That the magnitude of the invention may be justly appreciated by its effects, we shall inform the public that after the letters are placed by the compositor and inclosed in what is called the form, little more remains for man to do than to attend upon and watch this unconscious agent in its operations. This machine is then merely supplied with paper, itself places

the form, inks it, adjusts the paper to the form newly inked, stamps the sheet and gives it forth to the hands of the attendant; at the same time withdrawing the form for a fresh coat of ink, which itself again distributes to meet the ensuing sheet now advancing for impression, and the whole of these complicated acts is performed with such a velocity and simultaneousness of movement that no less than eleven hundred sheets are impressed in one hour.

p for in e is le

C

m

is

vis str me

mi by ser

vis if

lab

me

ma

nev

pau

but

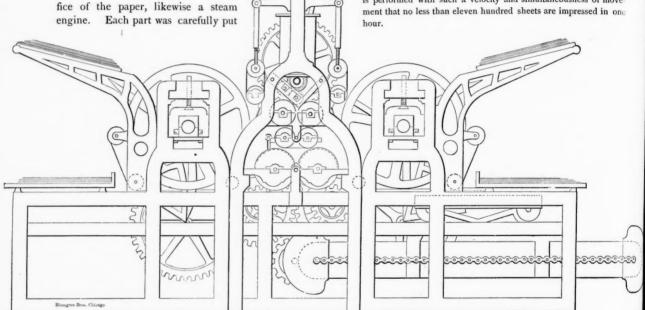
per

wel

whi

£I

sion



"LONDON TIMES" DOUBLE CYLINDER, 1814.

together until all was in perfect order and tested, and at last, on the ever memorable night of Monday, November 28, 1814, the orders were issued to hold the men in readiness, as late news was expected from the continent, and as all matter was set in duplicate, one set of forms was placed upon the press—the cut of which we present—and printed by steam at the rate of eleven hundred per hour.

As the safety-valve relieves the superabundant pressure within the boiler, so, when the edition was at last completed, the mind of Mr. Walters was eased from the strain under which for months he had labored, and the excitement which had wrought him to almost a pitch of frenzy was at an end; at this supreme moment of suspense, he entered the office amid his baffled workmen, and told them that, like Othello, their occupation was gone; and

"That the completion of an invention of this kind, not the effect of chance, but the result of mechanical combinations methodically arranged in the mind of the artist, should be attended with many obstructions and much delay may be readily admitted. Our share in this event has indeed only been the application of the discovery under an agreement with the patentees to our own particular business, yet few can conceive — even with this limited interest — the various disappointments and deep anxiety to which we have for a long course of time been subjected.

"Of the person who made this discovery we have but little to add. Sir Christopher Wren's noblest monument is to be found in the building which he erected; so is the best tribute of praise which we are capable of offering to the inventor of the printing-machine comprised in the preceding description, which we have fully sketched, of the powers and utility of his invention. It must suffice to say farther that he is a Saxon by birth; that his name is Koenig, and that the invention has been executed under the direction of his friend and countryman Bauer."

(To be continued.)

A SUNDAY AFTERNOON AT THE PRINTERS' ALMSHOUSES.

PERHAPS of all who work for the education and amusement of the masses the printer stands in the foremost rank, and yet no man comes in for less of thanks or notice.

We are amused and instructed by the matter his skill places before us in so clear and elegant a form, but we rarely, if ever, pause to think of the clever heads and hands which have wrought these benefits for us.

For artisans generally there is no lack of interest and sympathy; we watch with jealous eye the effect of their various trades upon their bodily health, not simply to satisfy curiosity or for the love of collecting statistics, but that means may be found to ameliorate their condition.

We are well informed, for instance, of the evil effect produced upon tailors by their position at work, and the foul air of their workrooms. We know of the slow poisoning which goes on among the manufacturers of certain elegant articles which adorn our rooms, and we are not ignorant of the disease which eats into the lungs of cutlers; but how little does the general public know of the condition of the printer?

The fact is, he never comes before us in any other way than as a contributor to our daily comfort and advancement; he works for us until his sight fails or sickness comes upon him, and when incapacitated he moves out of the ranks and another takes his place.

Thus the work goes on uninterruptedly. There is no break in the supply of our daily enjoyments; the same magazines, journals, and books meet our eye, and there is nothing to pull us up, as it were, to the knowledge of what is going on among those who spend their lives in our service.

Some months ago it was necessary for me to pay several visits to a large printing-office, and I was astonished, as a stranger, at the close thought and earnestness which the men necessarily bestowed upon their work; not only must no letter or figure, be they ever so tiny, stand awry, or be misplaced, but the almost unintelligible manuscripts must by them be deciphered and reduced to order and common sense.

I became very interested in these men, and when my visits ceased I found myself speculating as to their future, if failing sight or sickness should incapacitate them for labor; for they are a very independent class, and by no means likely to allow their necessities to be paraded.

I have seen a good deal of workhouses and their inmates, which include people of almost every class, but I never remember to have seen a printer in one of these pauper palaces, not because many of them are not poor, but that they would rather die of starvation than be paupers. It is satisfactory to know that the suffering members of this estimable class have not been wholly overlooked.

Mr. Biggs, the founder of the Family Herald, had the welfare of the printer much at heart; and at his death, which occurred about twenty-four years ago, left above $\pounds_{15,000}$ to be invested with the Charity Commissioners; the interest to be divided among forty-two printers in pensions of \pounds_{10} . This money goes by the name of "Bigg's

Charity," and is managed and administered by the Council of the Printers' Corporation. This benefit is always active, for as soon as a pensioner dies, or no longer needs it, the money goes to another who is waiting for it; not a penny remains idle.

The Printers' Almshouses at Wood Green, near Hornsey, afford permanent residence to twenty-four aged and infirm printers and widows of printers, and I was told that if I desired to make their acquaintance they would be very glad to see me.

I thankfully accepted the invitation, yet not without a fear that I should find them like so many other almshouse-folk—restless, discontent, and anything but thankful.

It was arranged that I should pay my visit on a Sunday afternoon as I could then be accompanied by some friends who take a deep interest in the Institution, and also see how the afternoons of that day are spent by the inmates.

At half-past two, I found myself at the building, a central block with two wings, with a garden in front. The center and one side were built at the expense of the trade, while the other side, or "Maria's wing," as it is called, was erected from a legacy left by a Mr. Wright. The original building was opened in 1856, and the wings in 1871.

We were received by the warder, an active, intelligent man, whom I should have supposed to be between fifty and sixty years of age, but who is really seventy-seven.

We went into his rooms, where I learned something of the residents before I saw them. The youngest is sixty-two, and there are six above eighty, the oldest being eightyseven, so that those between sixty and seventy are regarded as quite young people. All the homes consist of three rooms, except those in the "Maria wing," occupied by widows, which have but two.

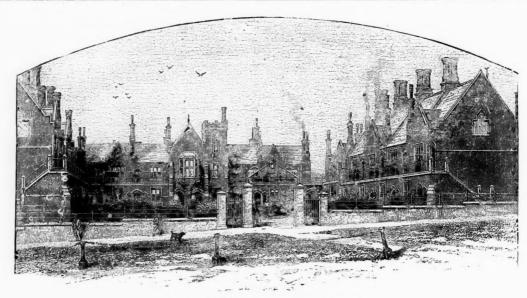
I asked how admission was gained, and found that it was by election; each subscriber of five shillings a year, or a Life Subscriber of £2, 2s., having the power of one vote.

A condition of admission is that each candidate must have been a subscriber himself or herself to the Institution.

I was anxious to learn what further advantages the inmates possessed beyond living rent free, and heard that a ton of coals a year was supplied to each of the twenty-four residents, that they had medical attendance and medicine free of cost, and that each had a small monthly sum towards support supplied out of the annual subscriptions, the Institution being unendowed.

Some of them are fortunate enough to enjoy a pension; and I heard one of the inmates say to my friend, "Oh, sir, if I could only get a 'Biggs,' I should be the happiest woman alive; I should not then have a want." This would have appeared to me a strange wish, if I had not previously learned the history of the legacy.

I now went to see the inmates in their neat and pretty rooms, nearly all of which were decorated with flowers, and found them quite unlike what my fears had suggested. There was an activity of thought, a ready sympathy with their neighbors, a wonderful patience in bearing the pains of rheumatism and the infirmities of old age, a kindliness in their manner, and a knowledge of the outer world which



THE PRINTERS' ALMSHOUSES AT WOOD GREEN.

puzzled me. Why were they so different to other almshouse folk?

As a rule, the people who live in almshouses are forgotten by the outside world; there is no sympathy with them, no work of loving help found to occupy their heads, hearts, and hands; they are expected to feel thankful to those who placed them there, and happy that they have a roof to cover them. And yet, left as they are to their own resources, what can they do but busy themselves about their own affairs from morning until night, noting each milestone on the way to infirm old age? What but feel very miserable, very forsaken, and anything but thankful?

Here all is otherwise; twenty-four people standing out conspicuously from all others I ever saw in like condition.

There must be some good influence at work to produce this, either from within or without. It is not caused by chance or spasmodic attention, nor by money alone; neither is it that these inmates are better off pecuniarily than other almshouse people, for several of them have under £16 a year to live upon. One thing helpful is the kindly disposition manifested towards the inmates from without, which binds them together, and keeps the spirit of love and gentleness among them.

Of course, like all other people, they have birthdays, but surely there is no one to care whether they have or not? I was struck to find that there is not a birthday in these twenty-four homes but is noticed by friends outside, either by the gift of flowers, a little tea, or some delicacy suited to their condition.

In the lovely summer weather, you may see six carriages at the gate, waiting to take them a drive into the country, and as they sit four together, they enjoy the fresh air, and a chat at the same time. But for this privilege afforded by thoughtful loving friends, many of them would never go outside the gates.

Christmas, New Year, and Easter are never allowed to pass unnoticed. Some little present of like character and value finds its way into each of the homes. Those who are sick, depressed or blind among them, are never without friends to help, cheer, and be eyes for them.

b

si si u tl tl L

fe

fr

m

ser

the

ter

diff

oth

wh

art.

gro

It was Sunday afternoon; all who were not too infirm were collected, as is their custom, at three o'clock in the Council Room, which is a handsome chamber containing a library, a harmonium, a portrait of Mr. Biggs, and a picture of Caxton and his printing-press. Two young ladies were at the harmonium ready to play and lead the singing, and all were sitting quietly and reverently, as if they were in God's house: I took a place offered me, and waited with them.

Presently a gentleman, at whose entrance every face grew brighter, came in accompanied by a clergyman. A hymn was sung, a chapter read by him, a few words of comfort spoken, and the object of his visit explained. It was his last Sunday in England, before returning to his African mission work, and he had come to give them some account of his labors out there, that they might feel an interest in it, and give him their sympathy and prayers. It was a most interesting half hour, and you had only to look at the audience to see how intelligent and sympathetic it was. He gave a graphic description of his difficulties as a teacher, at finding himself among a people of whose language he knew no word, and who were equally ignorant of his.

The short service was closed by the singing of a hymn, and the bestowal of the blessing of peace, and then the little congregation came forward to give the hand to the missionary, and to wish him God speed.

On dispersing, I watched them go into the rooms of those who had been unable to be present in order that they might relate what had been said in the Council Room, and so make the sick and infirm sharers in the pleasure they themselves had had.

The happiness, content and occupation outside themselves, which characterize the inmates of the Printers' Almshouses, are mainly due to the deep interest taken in them by the members of a large family, who live in the neighborhood. Father, mother, sons and daughters all take their part in giving happiness to them. I expressed my surprise to the father, whose occupations keep his brain busy from morning till late at night, as to how he could possibly find strength and time to bestow so much care upon the inmates of this institution; his reply was, "'It is my recreation after hard work."

In these days when we are apt to think that public charity and the gifts of the rich do everything that is necessary in the shape of help to the sick and poor, leaving nothing for the young, and certainly nothing for the poor to do, it is well to take hope and courage from the work so successfully carried on in the Printers' Almshouses. Money can do a great deal, and it is sorely needed in relieving distress, but there is a world of work outside the kingdom of money waiting to be done by the young of both sexes, and by the poor for the poor.

We not only want more almshouses, but more sympathy between classes. I cannot but think that many a desolate, sick and poverty-stricken person would be cheered if even some of the little ones as they leave school would peep in upon them, say a few kind words, interest them in what they have been doing in school; read just one verse of the Bible, repeat to them a hymn or kneel and say the Lord's Prayer with them; or take them a few flowers, put a glass of water by their side, make up the fire, shake their pillow, or by a thousand other little attentions show they feel sympathy with them. Why the sight of these young fresh faces bringing in the sunshine from without would give hours of happiness to those cut off from outside enjoyments!

You may think it impossible for the poor to help the poor, but I assure you it would shame some of us to see how cheerfully they give of their little, and how they will rise up early and go to bed late, in order to render assistance to helpless ones of their own class.

Whatever our condition, high, low, rich or poor, it is open to us all to have sympathy, one with the other, remembering that—

"Getheilte Freude ist doppelte Freude, Getheilter Schmerz ist halber Schmerz."

-E. Brewer, in Sunday at Home.

Written or THE INLAND PRINTER.

HINTS ON PRESSWORK.

BY R. TIMROTH.

TYPOGRAPHY and printing are *not*, strictly speaking, one and the same thing, as may be inferred from the recent decision of the International Typographical Union.

Typography only applies to one branch of the art preservative of arts. The word printing derives its name from the Latin word premo, to press, mark, stamp or infix letters, characters or figures by impression, which is done by different methods, each one practical and distinct from the other. The process used on steel cannot be used on stone; while that used on either cannot be used in the typographic art. On steel the character is cut below the surface; these grooves are filled with ink; the face of the plate is wiped

clean, care being taken not to remove the ink in the grooves. A damp sheet is laid on the plate with great pressure, and this damp paper is then forced in the grooves, receiving the ink, which produces a steel print.

In lithography the subject is either engraved or transferred on the stone, which is of a peculiar nature (the best specimens coming from Bavaria in Germany), that permits the use of fine shades and tints that cannot be produced on wood or metal. After the transfer is dry the face of the stone is subjected to a weak acid that hardens the lines, and leaves them slightly elevated. The stone is then dampened, the hard lines repelling the moisture. The inking roller has the contrary result. The print is produced by the paper receiving the ink which was deposited on the transfer lines. Lithography is sometimes called chemical printing, as it is based on the chemical action of water and oil. In typography each character is separate and movable, and is successfully applied where alphabets are used, but is a complete failure in such work as maps, stamps, currency, colored labels, etc.

It will be readily perceived from this brief description that there is more than one way to print, not forgetting the several means of using gelatine, the manufacture of calico, paper hangings, oil cloths and figured crockery, which are all produced by pressure, or, in other words, might be called prints. Most of these impressions are produced by machinery; the machines thus employed are called presses, and the person or persons having them in charge are called pressmen. Now, it stands to reason that a person running a press, and the party setting these small characters so as to represent words and ideas must belong to different branches, and cannot come under the same classification, as they represent two separate and distinct trades, as the present system is entirely different from the "olden time" system when a man commenced a job and followed it till finished.

All printing-presses are made to give an even pressure on the printing surface, but this desired evenness of pressure can only be obtained by an evenness in resistance. Different kinds of forms offer different degrees of resistance. A sixteen-page form of plain matter will give an even impression on a properly adjusted press. A cut form with here and there a blank page will give an uneven impression, as the resistance is unequal. This unevenness must be remedied by carefully cutting out the heavy spots and building up the light. Great caution and judgment must here be displayed, as this building is done with the finest of tissue papers. If too much is added on one page the resistance becomes so positive that the next page is rendered too light. This feature of printing is so sensitive that a dozen impressions of the same form may be taken before it is made ready, having as many first class men to mark them out, and yet no two sheets will be found alike, though they would all produce the same results to the eye of an inexperienced person; but on close examination it would be found that some had used better judgment and understood the resistance better. This accounts for some pressmen doing better work than others, and producing quicker and better results; for the workmen who study their presses every move and mark count. Some presses

are adapted for fine, others for common work; some are fast, while others are comparatively slow. A pressman who can do a good job on a two-roller press can do a far superior one on a four or six-roller press. It is necessary to have plenty of rolling on fine work where heavy ink is used; and it is worse than folly to buy a high-priced ink and then reduce it down to the consistency of news ink. If used pure and spread on very thin, it will go a great deal further and produce a far better result. In working gloss inks they should not be exposed to the atmosphere any more than can possibly be avoided. They will work better on a screw press than on a table. A large cylinder is preferable to a small one, as the former leaves the printing surface slower at the same rate of speed, thus avoiding the lifting of the paper. Any attempt to get a finish on a soft paper will fail, because all gloss colors must dry on the surface. In using soft paper the varnish soaks in, leaving the coloring matter dead and flat on the surface.

It is essential to have good, smooth-surfaced paper for fine cut work, especially if a nice, clean job is desired. A cut or photo-engraving is, as a matter of course, shallow, and if a soft, spongy paper is used the impression will force the fiber around the surface lines and make them look murky. The open, sketchy style of engravings has an advantage over ordinary wood cuts, as they will no doubt keep cleaner, but they also require more careful handling in their "make-ready," else their delicate lines and shadings will soon wear away and look thick, when they lose all character. It is bad policy to use an elastic or coarse, uneven manilla for a draw sheet, as a soft packing gives a very uncertain impression. The old race of pressmen that pulled the hand press, learned and were skilled on the Adams press, originators of the use of the soft blanket, have almost disappeared; and though some of the few connoisseurs still retain an admiration for the old blanket their places are being rapidly filled by the rising generation, so that at the present day pressboard does not seem to be hard enough. Some work from sheets of brass drawn on the cylinder surface. This style of packing developed itself gradually, and the honor of its discovery is, as generally the case, claimed by different parties in different locations. While its development was gradual, it had a hard road to travel; but from each successive year new ideas were developed, and the creative spirit of the age began to manifest itself in new forms, so that no difficulty is too great to the intelligent pressman. To demonstrate the result of a hard impression it is only necessary to refer to the method of the engraver in producing his proof; the employment of a hard, ivory folder, by which he can get great pressure without indentation on the surface of the cut.

It should not be forgotten that the ever-increasing demand for beautiful and novel color printing, which affords a boundless field wherein the genius and taste of the artist and pressman have full scope, renders it necessary to understand that the color and shadings are always true contrasts to the lights, and produce a natural harmony. There is no doubt in the practical mind that every color has its appropriate expression for which it may be employed, thus affording to develop taste; hence an endeavor should always be made to use warm and lively colors, as they har-

monize and produce a pleasing effect on the eye and mind. Red, blue and yellow are called the prime colors, and if any two of these colors cross each other, or are alternately mixed, they are called secondary colors. For instance, blue on red, or mixed, produces a purple; blue and yellow produce a green, and if red be mixed with yellow we have a bright orange. Thus it will be seen that by three impressions six distinct colors are produced. In like manner. by compounding or duplicating these secondary colors in pairs a third order is obtained. By mixing green and orange a citron color is obtained; orange and purple produce a russet; and if purple be lapped or mixed with green an olive is the result. Now three distinct grades of color have been obtained by descending from yellow to blue. If the three prime colors were indefinitely mixed the only product would be a dirty brown; nevertheless it is a valuable color, especially in producing a warm hue, but it can be made far richer.

It will thus be seen that by study and caution a great variety of colors can be produced with very little labor. The writer enjoys the criticism of an intelligent workman, and is always glad to profit by the experience of others, no matter what his own opportunities may be. If he makes a false step he is ever ready to draw back; if a step in the right direction he hopes to retain it.

THE VENTILATION OF PRINTING-OFFICES.

THE following interesting description of the new ventilating arrangements at the printing-office of the Daily Telegraph, London, England, recently completed, is taken from the Printing Times, and is worthy the attention of American employers. The want of proper ventilation in composing-rooms, and the continued inhaling of a poisoned atmosphere, has been the source of more fatality among the craft than any other cause:

In the composing-room, where one hundred and seventy compositors are engaged on night work, the light is supplied by seventy Argand burners. Having regard to the complaints of the men as to the vitiated state of the atmosphere in the room, the proprietors called in Messrs. Arding, Bond & Buzzard. Under their advice, a new and lofty roof has been put in, covered by a lantern along its whole length, the windows on each side of the lantern opening in two divisions by means of lever bars at each end of the room. Thus an ample outlet is provided for the vitiated air in summer or calm weather. Fresh purified air, either cold or warm, is driven in by a sixteen-inch Æolus Waterspray Ventilator, fixed in the basement. In warm weather this cool fresh air is used to keep down the temperature to an agreeable point, while in winter the fresh air can be raised in a very few minutes to a temperature of one hundred degrees by simply lighting the gasburners around the tubes through which the fresh air passes. Thus a continual supply of fresh air equal to five times the cubical contents of the room is afforded every hour. When the weather is such as to render open windows undesirable, the vitiated air is drawn off by two sixteen-inch Æolus Waterspray Ventilators, which have their communication with the composing-room through two panels occupying the position of two of the side-lights of the lantern. These are continued by sixteen-inch galvanized shafts outside the roof, entering the composing-room through the roof by the plate, and descending through all the floors into the basement. In each of the last six-feet lengths of these shafts a waterspray is fixed, and by simply turning the tap a powerful exhaust is immediately set up, drawing down the vitiated air from the composing-room into the basement. Thus a continual change of atmosphere is insured for the composing-room, although doors and windows be tightly closed.

"THE BEST IS THE CHEAPEST."



Van Bibber's Roller Composition,

Price 30 Cents per Pound.

IS THE BEST COMPOSITION MADE; IS THE MOST RELIABLE, AND DOES THE BEST WORK.

Van Bibber's "Rough and Ready"

Price 35 Cents per Pound.

Is the Cheapest Roller Material sold. By using it your winter Rollers will cost you about nineteen cents per pound, and the Rollers will be good ones. It is easy, quick and sure, and can be kept on hand for years.

Our goods are kept in stock by the following leading houses. Send your orders to them and SPECIFY VAN BIBBER'S:

FOR SALE IN THE EAST BY

FARMER, LITTLE & CONew York City.	J. & F. B. GARRETT Syracuse, N. Y.
VANDERBURG, WELLS & CO New York City.	H. L. PELOUZE & SON Washington, D. C.
COLLINS & McLEESTERPhiladelphia, Pa.	H. L. PELOUZE & SONRichmond, Va.
BOSTON TYPE FOUNDRYBoston, Mass.	CHAS. J. CARY & CO Baltimore, Md.

FOR SALE IN THE WEST BY

MARDER, LUSE & COChicago, Ill.	JNO. T. RETON & SON
BARNHART BROS. & SPINDLERChicago, Ill.	C. P. KINGSBURYSt. Joseph, Mo.
ST. LOUIS TYPE FOUNDRYSt. Louis, Mo.	JONES BROSDallas, Tex.
MINNESOTA TYPE FOUNDRY CO., St. Paul, Minn.	J. J. PASTORIZA Houston, Tex.
ROB'T ROWELLLouisville, Ky.	CINCINNATI TYPE FOUNDRY Cincinnati, O.
H. H. THORP MANUF'G COCleveland, O.	LOUIS SNIDER'S SONSCincinnati, O.
E. C. PALMER & CO New Orleans, La.	CHATFIELD & WOODSCincinnati, O.
DUNLAP & COHENAtlanta, Ga.	CHARLES STEWART PAPER COCincinnati, O.
C. F. BREWSTER	ALLAN C. KERR & COPittsburg, Pa.

Orders are also promptly filled by the following Advertising Agencies:

DAUCHY & CONew York.	LORD & THOMAS Chicago, Ill.
N. W. AYER & SON Philadelphia, Pa.	EDWIN ALDEN & BRO



50 LONGWORTH STREET,

Rollers Cast Promptly.

r,

n d

n or If

it

CINCINNATI, OHIO.

JACOB MANZ.

ALFRED BERSBACH.



RELIEF-LINE ENGRAVINGS

Of any conceivable subject executed in the very best style and at the most reasonable prices. For samples of work we refer you to The Inland Printer Co. Liberal discounts allowed printers and publishers. Send for estimates.

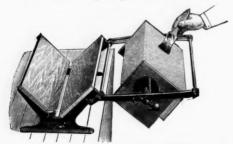
Respectfully,

J. MANZ & CO.

GOLDING'S

TABLET * PRESS

For Blocking Paper of all Sizes.



SHOWS THE POSITION OF PRESS WHEN PAPER IS READY FOR CEMENTING.

This press reduces cost of blocking to comparatively nothing. Over 5000 sheets can be blocked at a time in about ten minutes.

EVERY PRINTER, STATIONER AND BINDER NEEDS IT.

Send for Circular.

Prices, \$9 and \$15.
OPINIONS.

The Press is sold on trial.

JOHN CARTER & Co., Paper Dealers, Boston; "It would be difficult for us to get along without it. Everyone doing blocking should have one."

JOHN McINTOSH, Binder, etc., Boston; "The great advantage is in getting at both sides of a pad without a possibility of the paper slipping or twisting in any way. I like it."

way. I like it."
RICHARD DAVIS, Mercantile Stationer, Boston: "It gives entire satisfaction."
ANGEL'S Printing Office, New York City: "One week's use of the TABLET
PRESS pays for its cost."

Patented and Manufactured by GOLDING & CO. Makers of and Dealers in PRINTING PRESSES, TOOLS, TYPE AND MATERIALS,

183 to 199 Fort Hill Square, BOSTON.

Send three two-cent stamps for 100 pp. illustrated catalogue.

GRAY'S FERRY

PRINTING : INK

WORKS.

÷

C. E. ROBINSON & BRO.

710 SANSOM ST.

PHILADELPHIA.

•:•

27 BEEKMAN ST., NEW YORK. 66 SHARP ST., BALTIMORE. 198 CLARK ST., CHICAGO.

HOLYOKE.

NEW YORK.

CHICAGO.

W. H. PARSONS & CO. Paper Manufacturers

News and Book Papers

Card Board, Envelopes, Flat Writing, Etc.

CHICAGO OFFICE: 148 LA SALLE STREET.

C. M. DAVIS, AGENT.

SEND FOR SAMPLES AND PRICES.

HOWARD IRON WORKS, BUFFALO, N. Y.



MANUFACTURERS OF

PRINTERS.

BOOK-

BINDERS

-AND-

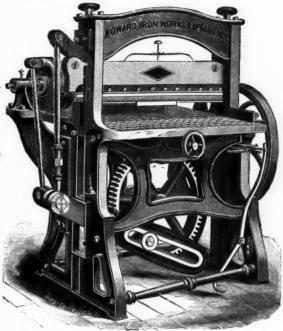
PAPER-

MAKERS

MACHINERY.

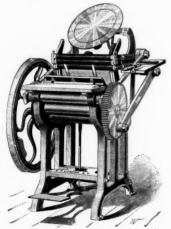
WRITE FOR PRICES

MACHINERY IN THE MARKET.



BARNHART BROS. & SPINDLER, Gen'l Western Agents, 115 & 117 Fifth Ave., CHICAGO

New Style Gordon Press.



Five Sizes Made: 13x19, 11x17, 10x15, 9x13 & 8x12, (INSIDE THE CHASE).

CIRCULARS ON APPLICATION.

GORDON PRESS WORKS

99 Nassau Street, NEW YORK.

Printing Presses and Material F. M. POWELL & CO.,

Cottrell & Babcock, Cylinder, 39x 54, 2,100 Campbell, Cylinder, 39x 54, 8x, 1,500 1 9-column Washington Hand-Press, 215 1 9-column Washington Hand-Press, 215
1 7x11 Gordon Press, old style 145 one lot or divided, to suit purchaser. 1 8x12 Gordon Press, old style, 200 do office, including 3 Job Presses at a bargain. 1 6-column Hand-Press, 1 55 of column Army press, - 55 of Column Army press

BRASS RULE.

H. HARTT, Pres't. WM. T. HODGE, Sec'y. ANDREW HARTT, Treas.

GARDEN CITY TYPE FOUNDRY.

CAPITAL STOCK, \$150,000.

ORGANIZED SEPT. 10, 1883.

Manufacturers and Dealers in

PRINTERS' AND BINDERS'

Machinery and Material.

Cor. 19th & Blackwell Sts.

180 & 182 Monroe St.

CHICAGO.

DE VOS' PATENT LEAD AND SLUG RACK.

Cabinets, Cases, Stands,

Wood Furniture, Reglet, Imposing Stones, Etc.

IMPORTERS OF

German Printing Inks and Bronzes.

C. JURGENS & BRO.

86 & 88 Dearborn Street,

CHICAGO.

Electrotypers Stereotypers,

MANUFACTURERS OF

≡LEADS, SLUGS,≡

LABOR-SAVING FURNITURE.

COUNTRY ORDERS WILL RECEIVE PROMPT ATTENTION.

Printers' Furnishing Warehouse.

ESTABLISHED 1872.

Illinois

= Type-Founding-Company,

200 & 202 S. Clark St., Chicago.

WESTERN AGENTS FOR

Geo. Bruce's Son & Co. and James Conner's Sons,

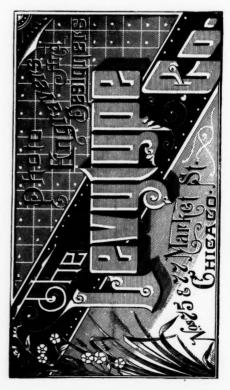
-NEW YORK.-

Newspaper Dresses and Complete Outfits for Job Offices.

PRINTING PRESSES.

Of all makers, and everything requisite in the Printing art, furnished at manufacturers' prices.

Send for our New Specimen Book for 1883.



Send Ten Cents for Illustrated Catalogue

UNTIL MARCH 1st.

On receipt of four two-cent stamps.

Address, C. W. AMES,

go Chambers St.,

NEW YORK.

THEO. L. DEVINNE says of it: "A diagram that shows at a glance the folds of all Regular Papers, from Flat Letter to Imperial—will be found of GREAT SERVICE in determining the exact amount of paper required for irregular as well as regular sizes."

SHEPARD & JOHNSTON,

PRINTERS OF FINE JOB WORK,

FOR THE TRADE

BOOKWORK,

BILL HEADS,

CATALOGUES,

PAMPHLETS,

MAGAZINES,

LETTER HEADS,

BUSINESS CARDS,

PROGRAMMES.

SPECIAL FORMS SET UP AND ELECTROTYPED

FOR THE COUNTRY TRADE.

140-146 MONROE STREET, CHICAGO.

The typography of this journal is a sample of our work.

SMITH & SEAL,

DEALERS IN

PRINTERS' AND BINDERS'

Machinery & Materials



No. 124 EXCHANGE PLACE,

Philadelphia, Pa.



ESTIMATES FOR NEW AND SECOND-HAND

OUTFITS FURNISHED.

FRENCH LINEN.

A STRICTLY FIRST-CLASS CREAM LAID LINEN FLAT PAPER.

500 Sheets to Ream.

Made of Pure Linens. Suitable for Finest Office Stationery.

We carry in Stock the following Sizes and Weights:

Above prices are net.

CHICAGO PAPER COMPANY.

140-142 MONROE STREET, CHICAGO, ILL.

ESTABLISHED 1824.

NEW ENGLAND

TYPE FOUNDRY CO.

BOSTON, MASS.

DELIVERY HAND

WAGONS

SHEPARD & JOHNSTON.

243 Washington Street.

*

NEW DESIGNS

BEING CONSTANTLY ISSUED BY US.

Chicago Metal Felloe Co.



THE STRONGEST AND MOST DURABLE EVER OFFERED TO THE TRADE.

CHICAGO METAL FELLOE Co.: CHICAGO, August 29, 1884.

Gents,—The hand cart you supplied us is undeniably the strongest on the market; the metal felloes cannot possibly wear out or break with any ordinary usage; we strongly recommend them.

Yours truly,

FACTORY AND OFFICE:

Corner 53rd and Arnold Streets, CHICAGO, ILL.

GREAT WESTERN TYPE FOUNDRY.

Barnhart Bros. & Spindler,

п5 & п7 Fifth Ave., CHICAGO,

MANUFACTURERS OF

SUPERIOR COPPER-MIXED TYPE

IISED BY THE

Chicago Tribune, Chicago Times, Chicago Daily News, Chicago Staats Zeitung, A. N. Kellogg Co. (all offices), Chicago Newspaper Union, Western Newspaper Union, St. Paul Globe, St. Paul Day (new paper), Minneapolis Tribune, Minneapolis Journal, Kanaax City Journal, Des Moines Register, Des Moines Leader, Quincy Whig, Quincy Herald, Dubuque Herald (dress 8 years old), Dubuque Times, Keokuk Gate City, Burlington Argus, Muscatine Tribune, Muscatine, Journal, Fort Wayne Gazette, Fort Wayne Sentinel, Oshkosh Northwestern, Springfield (Ills.) Journal, and scores of other leading papers throughout the

IF YOU CONSULT YOUR BEST INTERESTS YOU WILL

Buy only our Superior Copper-Mixed Type.

WE ARE GENERAL WESTERN AGENTS FOR THE

BABCOCK PRINTING PRESS CO'S DRUM CYLINDER, TWO-REVOLUTION AND LITHOGRAPHIC PRESSES,

THE HOWARD IRON WORKS' PAPER CUTTERS,

AND ALSO CARRY A FULL LINE OF

ALL KINDS OF JOB PRESSES.

ESTIMATES FURNISHED

COMPLETE OUT-FITS SHIPPED ON SHORT NOTICE.

CARTER, RICE & Co.

CORPORATION.

WHOLESALE PAPER DEALERS,

252 Devonshire St., BOSTON, MASS., U.S.A.

WE CARRY A LARGE AND VARIED STOCK OF

Book, News, Cover and Manilla Papers

FINE, SUPERFINE AND ENGINE-SIZED

FLATS, CARDS, CARD-BOARD, TAGS, TWINE, ETC.

In fact, every kind of Paper a Stationer or Printer has occasion to use.

SEND FOR SAMPLES

OF LATEST THING IN COVER PAPER,

Our "Imperial" and "Royal Antique."

JAS. L. LEE, PRESIDENT.

PAUL SHNIEDEWEND, SEC. AND TREAS.

Shniedewend & Lee Co.—— ——Printers' Warehouse,

303-305 Dearborn St. ¥ CHICAGO ¥ 46-48 Third Avenue.

WESTERN AGENTS FOR

MacKellar, Smiths & Jordan, Johnson Type Foundry, Philadelphia.

We have now on hand a large and most complete stock of Type, Borders, Cuts, Rules, Etc., including all the latest productions of this celebrated Foundry, and hope to be favored by all the old patrons of Mackellar, Smiths & Jordan, and many new ones. Promptness a special feature.

SHNIEDEWEND & LEE CO.

TELEPHONE 508. P. O. BOX 422.

THE INLAND PRINTER,

A TECHNICAL JOURNAL, DEVOTED TO THE ART OF PRINTING.

Published Monthly by

THE INLAND PRINTER COMPANY.

2 TAYLOR BUILDING, MONROE ST., CHICAGO.

H. O. SHEPARD, PRES. - - JOS. PEAKE, SEC.-TREAS.

A. C. CAMERON, EDITOR.

SUBSCRIPTION RATES.

One dollar and a half per annum in advance; for six months, Seventy-five Cenis; single copies, Fifteen Cenis.

The Inland Printer will be issued promptly on the tenth of each month. Subscriptions, payable in advance, may be sent to the Secretary by postoffice order or in currency at our risk.

The Inland Printer will spare no endeavor to furnish valuable news and information to those interested professionally or incidentally in the printing profession, and printers throughout the West will confer a great favor on the Editor of this Journal by sending him news pertaining to the craft in their section of the country, particularly individual theories and experiences of practical value.

ADVERTISING RATES.

	ONE MONTH,	THREE MONTHS.	SIX MONTHS.	TWELVE MONTHS.
One inch	\$ 4 00	\$11 00	\$ 21,00	\$ 38 50
One-eighth page	8 00	22 75	38 50	75 00
One-quarter page	12 00	34 00	65 00	115 00
One-half page	20 00	56 00	105 00	190 00
One page	35 00	90 00	170 00	325 00

The following gentlemen have authority to receive and receipt for subscriptions to The Inland Printer:

THE INLAND PRINTER:

NEW YORK: Franklin A. Baxter, Shoe and Leather Reporter, 17 Spruce street. PHILADELPHIA: C. W. Miller, Rec.-Sec. Pressmen's Union, P. O. Box 269. WASHINGTON, D. C.: E. H. Thomas, N. J. avenue and H street N. W. ST. LOUIS, Mo.: W. H. Bowman, 2514 Cass ave. CHICAGO: Edward Langston, with J. M. W. Jones Printing Co. Boston, Mass.: Silas L. Morse, 117 Franklin street. TORONTO, ONT.: James McDonald, with Rowsell & Hutchison. BUFFALO, N. Y.: E. D. Eastabrook, 81 W. Genesee street. MEMPHIS, TENN.: H. P. HANSON, Sec'y Typographical Union No. 11. GRAND RAPIDS, MICH.: M. A. True, 51 and 53 Lyon street. MINNEAPOLIS, IND.: Fred. A. Lorenz, Carlon & Hollenbeck's Pressroom. WINNIPERG MAN.: A. Fletcher, Sec'y Typographical Union No. 191. SACRAMENTO, CAL: J. L. Robinette, with Lewis & Johnston, 410 J street. MILWAUKEE: W. P. Harmon, at Burdick & Armitage, Broadway. Montreal: J. E. Tardiff, 11 St. Louis Hippolyte street. PORTLAND, OR.: I. P. Helmer, 68 Montgomery street.

The INLAND PRINTER may be obtained at retail of the following well-known

THE INLAND PRINTER may be obtained at retail of the following well-known

THE INLAND FRIENDS.

newsdealers in Chicago:

Wells B. Stzer, 152 Dearborn street.

PIERCE & SWYDER, 122 Dearborn street.

McDonald & Co., 55 Washington street.

Applications for agencies will be received from responsible working printers in every town and city in the United States and Canada.

CHICAGO, JANUARY, 1885.

IMPROVE THE LEISURE HOURS.

PHERE is a great deal of unmeaning twaddle indulged I in by a class of ne'er-do-wells concerning the hardships and misfortunes of life; men who seem to forget that it is not the possession, but the proper use of privileges, which avail aught in the struggle for the mastery. The brightest lights of our profession are those who have risen from the humbler walks of society. But they certainly didn't sit moping, as too many of our chronic growlers do, cursing society and bemoaning the fact that they were not born with a silver spoon in their mouths. Difficulties but nerved them to greater exertions and a determination to surmount them. They utilized every leisure hour; availed themselves of every opportunity to study and improve their minds. They watched and waited, and in the meantime qualified themselves for a higher plane, so that when the sought-for opening presented itself they were in a

position to accept it, while sobriety, frugality and strict attention to business enabled them to achieve success and eventually reach the top round of the ladder. Of course, misfortune, in spite of all precautions and foresight, will become an occasional visitor; human judgment is fallible at best, yet conceding all that is claimed, it is too often the case that many, very many, of life's failures are the result of carelessness, neglect of business, incapacity or extravagance, of causes within instead of beyond control.

The great trouble is that workingmen, as a class, and printers are no exception to the rule, do not make the most of their opportunities. A few years ago, at the earnest request of several labor organizations, the writer of this article secured the services of two self-made men of national reputation, the announcement of whose names could at any time fill the largest auditorium in Chicago, to deliver, without money and without price, a series of lectures specially devoted to the interests of the producing classes. The admission fee was reduced to a nominal sum, barely sufficient to defray the necessary expenses, and though these entertainments were, through the kind courtesy of the press, gratuitously advertised, and the nature of the subjects announced in the workshops and factories, a beggarly array of empty benches greeted the men who had kindly devoted their time and energies for the benefit of those who had enlisted their sympathies. On the other hand a visit, the first evening referred to, to the dens of iniquity, misnamed "concert rooms," found them crowded with workingmen, for whom the filthy jest of the bedizened harlot had apparently more attractions than words of wisdom from one of the foremost orators in the land. In these rooms, filled with the fumes of poisoned liquors and viler tobacco, were to be found many of the very men who had been the most persistent in their demands for these series of entertainments, because, as they claimed, they were unable to pay seventy-five cents or one dollar. These same lectures, repeated by public request, at the usual prices, found standing room at a premium. Comment is unnecessary, though straws show which way the current runs. It is customary to point with pride to Benjamin Franklin, Horace Greeley and others who have graduated from a printing-office, but it is safe to affirm that if they had spent their leisure hours as a number of their fellow craftsmen do, their names would not now be held in the veneration they are.

In the race of life so-called luck has less to do with success than most people are willing to concede. Cause and effect go together. The Cunard line of steamships is frequently referred to as a lucky (!) line, but when it is taken into consideration that every timber in these vessels, from the keel upward, is inspected and tested by a special agent of the company, in fact, that everything that enters into their composition, from a bolt to the ponderous engine, is subjected to the closest scrutiny; that only skilled workmen are employed; that the officers are promoted grade by grade, capacity being the only test, after being subjected to a thoroughly practical training under the company's auspices; that the rules controlling the management of the vessel, crew, etc., etc., are iron-clad, and also that every detail is reduced to a science, it will be

found that good management has formed an important factor in the good luck which has enabled the steamers of this company to plough the waves of the Atlantic for fifty years without the loss of a passenger or a pound of baggage.

There is too much theorizing and misdirected effort in fife's struggle. Perseverance in the right channel will be found a far more valuable ally than luck, and a determination to make the most of what we have, a better augury for success than the vaporings of would-be philosophers. There was a fund of common sense in the rebuke of the ferryman on one of the Scottish lochs, who had for passengers, a stalwart clergyman and a dyspeptic, callow youth. A storm arising midway across, the gentleman of the cloth suggested that the dyspeptic help the boatman, while he invoked divine aid. "Nay, nay," replied the canny Scot, "let the little fellow do the praying; you can do better service by giving me a hand at the oar.

> "Honor or shame from no condition rise; Act well your part; there all the honor lies."

SAWDUST PAPER.

N the November issue of The Inland Printer, in referring to the rise of white paper caused by the embargo on foreign rags, and the injurious results such continued embargo would have on the printing business, and especially on the one and two-cent dailies, we said:

It will thus be seen that the outlook from a business stand-point is far from encouraging; and while there is no doubt this action will lead to temporary embarrassment at least, it remains to be seen whether the inventive genius of the American mechanic will not ultimately rise equal to the emergency, and by the appliances of new machinery, agencies and material, so far as publishers and printers are concerned, avert in some measure the threatened disaster.

An answer to the above query has reached us sooner than we anticipated. Before us lies a copy of the Rutland (Vt.) Herald of November 24. The paper from which it is printed is the product of the roller pulp machine invented by G. H. Pond, of Glens Falls, New York. By it sawdust, shavings, chips, pieces of wood, or any refuse of saw-mills, can be made into a pulp of fine, clear fiber in a very short time. Practical experiments have also proved that begasse, the debris of sugar cane, cotton stalks, wild hemp, flax and hemp tow, with the stalks mixed with it, can also be made into pulp, with this machine and process, thus utilizing a new waste product.

The manner of reducing sawdust or shavings, pieces of wood, or other fibrous materials to a perfect pulp with this machine is to press the material heavily with the rollers, which pass over it incessantly as they revolve within an inclosed cylinder, whose inner surface forms an endless bed, on which the rollers revolve, the material being continuously forced under them by its circulation. The disintegration is assisted by the action of steam under pressure of fifty to eighty pounds, to which is added a small per cent of alkali, which neutralizes the acids and destroys the gum of the wood. The steam and alkali also soften and toughen the fiber so that it is not broken by contact with the rollers. There is no grinding in this process, no part of the pulp is made into a powder; consequently the product is all fiber. Bark and knots, sometimes accompanying sawdust, can be screened out, or pass off with

water during the process of washing. Pulp made by this process is said to be superior in every respect to any pulp made from wood, not excepting chemical pulp, the reason being that the fiber is preserved intact, and the cellulose is left with it, thus making the product soft and pliable, and at the same time giving it great strength. The tensile strength per square inch of news paper, which contains from fifty to seventy-five per cent of ground wood pulp and balance hard stock, is from eight to twelve pounds, while the paper upon which the Herald was printed, made entirely from sawdust, stood a test of seventeen pounds to the square inch, thus demonstrating that it is much stronger than paper made from one-third rags. But while the paper possesses such strength, it is not harsh and takes a fine impression, and from present indications this sawdust pulp is destined to take the place of rags for hard stock.

A great advantage is, that all kinds of paper can be made from the pulp without the addition of such expensive material as rags, cotton jute, etc., thus securing the manufacture of paper at a reduction of from thirty to fifty per cent of its present cost. The pulp from this machine and process is also adapted to the manufacture of different grades of paper, from wrapping to the finest qualities of white, while the unbleached pulp, it is claimed, will make wrapping paper equal in color and strength to the best manilla.

But this is not all. When this machine was successfully completed it was found that there was no known process for bleaching wood pulp economically and satisfactorily on a commercial scale. After several months experimenting its inventor succeeded in perfecting a process by which wood pulp, jute, flax, hemp or any other fibrous material is bleached perfectly white, in large quantities, in a very expeditious, efficient and economical manner, without the slightest injury to the most delicate fibers.

The woods adapted to this process of making pulp are the soft woods, spruce, pine, fir, hemlock and poplar; in fact all woods not classed as hard. Hemlock makes the strongest fiber of all, being fully equal to jute in strength, spruce, pine and poplar coming next. Although this scheme is in its infancy, we have no reason to doubt its perfect and ultimate success, and that any temporary difficulties presented will be effectually removed by time and experience.

A WESTERN editor on assuming control of a weekly journal, under the heading of "Salutary," - we suppose intended for "Salutatory,"-thus outlines his policy:

We shall run this paper as may seem best to us, and shall say just what pops into our mind first. If we get licked every day or so we shall charge it to profit and loss. Will not straddle anything, but on the contrary, will fearlessly advocate just dues to every man, party and organization, and if we get no reward on earth and none in Heaven either, then had we kicked ourselves, instead of publishing a paper, we will feel that it would have been better.

A PREMIUM of thirty thousand dollars, according to the Paper World, has been offered by the Mexican Government to anyone who will establish in that country a paper mill at a cost of \$150,000. The government will also concede the right to all cactus plants on the state lands.

CORRECT DISTRIBUTION.

THERE are fewer tests by which the qualifications of a I compositor may be more correctly judged than that of distribution. Show us a man who thinks it time wasted to look for a letter misplaced, because "it will be found anyhow," who deems it unnecessary to separate the four and five em spaces, or whose quad box is made the receptacle for broken, defaced or wrong font type-and there are numbers of so-called printers, who practically say this in action if not in word-and we will show you a sloven whose work in composition and spacing corresponds. There are compositors, found in almost every office, who, if judged by the condition of their thick space box, seem to emulate the position of the hotelkeeper in northern Wisconsin who, when asked by a party of hunters what game he could furnish for dinner, replied, "Anything, gentlemen, anything you desire, from a canary bird's tongue to an elephant's hindquarter." The thin space and en quad are mixed in loving embrace, and even the hair space is more apt to find a home there than in its proper location; and it may safely be inferred that where such carelessness is manifested in one respect, its operations will not be confined to the space boxes; with what results our readers can judge.

But it is generally the small cap case which is the greatest sufferer at the hands of the careless distributor. The alphabet may be managed all right, but ask him for a or pass, fumble from one section to another to find it, generally accompanied with the remark that "it should be here somewhere," but the exact location of that somewhere he is unable to divine. His fraction boxes are generally in a similar condition. The ½ is as likely to be found where the ¾ should be, and vice versa to the end of the chapter. What box they are lodged in is a secondary consideration, so long as they are thrown in the neighborhood where they are supposed to belong.

The careless distributor, like the careless compositor, generally has another characteristic by which he may be known. He seldom, if ever, troubles himself about the type he drops, and as a result when he gets through, the floor is littered, and a casual observer might infer that a type casting machine had been at work instead of an intelligent (?) printer. The old fashioned injunction, "when one letter is dropped pick up two," may be good enough for "old fogies," but in his opinion is better maintained in the breach than in the observance. If he picks them up at all he does so when the case is filled or his day's work done, and when one-half of them have been defaced and consequently rendered useless.

It is needless to add that from a case distributed under such circumstances, a clean proof is next to an impossibility. Dirty distribution and dirty composition are almost as inseparable as the Siamese Twins. The errors must either be corrected in the stick or on the galley, and in either case, especially where time is an object, such work is unprofitable both to the office and the victim. Of course we do not claim that this class of men should be accepted as a criterion by which the majority of compositors should be judged, or that their presence is long

tolerated in a well conducted establishment. By no means, and yet they furnish a quota sufficiently large to warrant a protest against their practices, and what is equally true their numbers are increasing. Their "headquarters" is generally the "Cheap John" offices, where they are willing to work for what they can get, only, however, to appear like locusts whenever a difficulty is on the tapis, when their make-shift services are accepted till necessity brings submission, and their pestilential presence is no longer required.

There is another side to this question, however, which should not be forgotten. The lack of a uniform system in laying the upper case is to be deprecated, for there are scarcely two offices in the same city in which the same system is followed; and in fact many of the fonts now made contain more characters than there are boxes, consequently a subdivision of some of them is necessary. In the absence of such a system the labeling of character and fraction boxes would ultimately save a great deal of time and trouble, and deprive the sloven of the subterfuge so frequently raised, that in the last office he worked in the cases were laid in a different manner. A stitch in time saves nine, and when men are continually changing, a little care in labeling the case would be time well expended.

THE GRIEVANCES OF PRESSMEN.

THE inclination manifested in some quarters to cut aloof from the International Typographical Union, and establish an independent organization, whose members shall be composed exclusively of pressmen, seems to be meeting with favor in certain localities, in which it has heretofore met with passive if not active resistance. Some of our correspondents have referred to the matter in detail, showing that steps have already been taken in various sections to bring about such a result.

The exception taken by the pressmen to the existing state of affairs is, that they are numerically so few in numbers in comparison with what may be styled the "compositor" element, that their special interests are almost overlooked, and that the character of the subjects discussed and the action taken by the International body is such, that they have little, if any interest in its deliberations. This claim, however, is made more in a philosophic and matter of course than in an acrimonious spirit, and seems to be accepted as an inevitable result under existing circumstances, rather than being actuated by innate selfishness or a desire to do an intentional wrong.

That there may be, and may have been grounds for such a charge we do not deny, though we seriously doubt if the plan proposed would redound to the advantage of the pressmen's interests. On the contrary we believe that self-interest, if no higher consideration, demands consolidation in place of secession, disintegration or isolation; because, if the entering wedge of dissolution is allowed in one instance, where is the line of demarkation to be drawn? If the pressmen secede on account of a real or imaginary grievance, why may not the job or book printers take similar action, under a similar plea? No, no. "In

union there is strength," and the practical recognition of this principle must never be lost sight of.

We further insist that these and other objections of a similar character would be effectually removed by the adoption of a system akin to that followed by the British Science Association, namely: After the transaction of business of a general character, affecting the welfare of all branches represented, and from which special legislation would be excluded, let there be a subdivision of the several elements of the trade, and independent sessions held under their respective presidents for the consideration of questions affecting their distinctive interests. By this method all affiliated trades would have a voice in shaping general legislation, which fact would furnish a guarantee that all independent action, taken as distinctive crafts, would be in harmony with that taken by the united body. A sense of mutual dependence, honor and self-interest would be apt to secure this result, which is certainly more desirable than the feeling of dissatisfaction which prevails today. Such action would simply be a practical recognition of the "home rule," or state right principle, which, while allowing the widest latitude to each branch in special craft regulation, compatible with the welfare of the interests involved, would effectually remove all just cause of complaint from any quarter.

We throw out these suggestions for what they are worth, and trust to hear from our correspondents on the subject.

A MOMENTOUS QUESTION.

N employing printer in Norwich, England, writes to A the London Press News inquiring as to the custom of the trade in regard to paying apprentices for Good Friday, Christmas and bank holidays. As at present he pays his apprentices, two in number, for each of these days, other lost time being deducted, he finds his expenses increased, without "show of increase in the work done." Strange to add, the journal referred to, not only publishes the inquiry, but devotes a column to a serious reply. Now, the " increase in his expenses," caused by paying two apprentices, who probably received \$2 per week, for four or five holidays in the course of a year, must certainly assume formidable dimensions. At a liberal estimate £1 or \$5 each boy per annum, 10 cents per week, would meet the outlay, yet this bagatelle is made the subject of a dolorous communication to a trade journal. We are afraid, if the truth was known, that the business and disposition of this inquirer correspond with the size of the class of the boy whose father promised to give him half a dollar the first time he became dux. After a wearisome delay he rushed to his father, exclaiming, "O, pa, I want my half-dollar; I am at the head of my class." "Very glad to hear it, my son," responded the proud parent; "here's your money; now tell me how many are in your class?" After some hesitancy the hopeful replied: "Oh, there's only me and another fellow, but the other fellow wasn't there today."

WITH the fall number of the *Typographic Advertiser*, Mr. Wm. B. MacKellar assumed the control of this well known typographic quarterly, a position so long and so ably filled by his father, Mr. Thos. MacKellar.

HINTS TO APPRENTICES.

Our series of articles under this head will be brought to a close with a few suggestions in relation to general job work, and to a young printer desiring to make himselt proficient in his profession, the following remarks will prove acceptable.

Business cards, note and letter heads and circulars make up a large portion of the job printer's work, and it is on these that a learner usually gets his first practice. A few years ago, so long as the name of the firm, the nature of the business and the address of the office or store at which it was transacted were plainly set forth, the customer was satisfied; but in these days, when almost everyone is looking for something new in designs or styles, a successful printer has to be an artist to a great extent, and capable of designing and executing work which was formerly considered to be confined to engraving or lithography. A glance at the specimens of typography now appearing in the pages of The Inland Printer will be sufficient to confirm our statement. Patrons of the printing profession look for and expect something neat, tasty and attractive, and the learner should educate himself up to the requirements of the age.

In the classes of work above referred to there is plenty of scope for the display of such ability as the printer possesses. In business cards, for instance, rule and border work, flourishes and ornaments can be combined in such a manner as to make the work almost a "thing of beauty" and a "joy for ever." - But care must be taken lest a too liberal use of embellishments destroys the prime object of the work, namely: its utility as a business announcement. Always take care that the type and ornamentation agree. If light-faced type is used, hair-line rules and flourishes should be combined therewith, and if heavy, boldfaced types are used, then a more prominent style of ornamentation may be adopted. Have a plan settled in your mind or sketched out on paper before you begin composition; otherwise you may have to undo your work when half completed and begin all over again. Let the lines be so proportioned as to length and prominence, that no two or more will "clash." In other words, do not have two or more lines of the same length and strength close together or following each other. If possible, let each line be of a different length, but so arranged as to produce a pleasing effect.

In letter-heads, note-heads and bill-heads, there is usually a large amount of space to be filled with a small quantity of reading matter. In such work as this, scrolls, shields, medallions and geometrical figures of all kinds can be advantageously employed, and where an office is furnished with a moderate supply of the many labor-saving inventions of the present day, such as rule-cutters, mitering machines, curvers, etc., these designs can be executed without an extravagant expenditure of time. Great care must be used in justifying work of this character, and as little cardboard or paper used as possible, or the work is liable to be thrown out of shape in locking up. Where designs in rule-work are used it is best to lock up very gently and pour a thin preparation of plaster into the

interstices, which will set in drying and make the form almost as immovable as an electrotype.

Circulars are in many cases set according to the instructions of the customer ordering them, and the compositor has to obey, whether his ideas coincide with those of the customer or not. When the choice of type and style is left to the compositor, he should read carefully the copy to see whether anything needs to be displayed, or whether it is simply a straightforward statement from beginning to end. If there is a great deal of matter to be got into a certain space it is a good plan to set a line of the type thought most suitable, then count the number of words to a line of type and compare the same with the number of words and lines in the copy. By this means a calculation can be made of the exact space which the matter will occupy. In determining the size of type to be used, always incline to the one that will admit of being spaced with leads or slugs, for a circular set in brevier single or double leaded looks far nicer than one set in pica or long primer solid. If a circular has to be well displayed, the type used for display lines should agree somewhat with the body-type selected. Thus, with old-style body-type, display lines should be in light-face Gothics, Celtics, Latin or old-style Antiques, etc., as such types agree better with old-style letter than heavier faces of display letter would. If the lines have to be widely spaced the spacing between words should be regulated accordingly. Thus, if a nonpareil space is to be used between lines the words should be spaced with not less than en quads. Even spacing goes a great way towards making a circular look well, and we have heard some good printers assert that "everything depends upon the spacing"; but we are not prepared to go so far as that, for a badly set job cannot be made to look good, no matter how well it may be spaced. But the spacing of work should be carefully attended to, as it is attention to details that makes a good workman.

Sometimes circulars have to be printed in two or more colors, and how to get the different forms made up so as to register has often been a source of annoyance to the inexperienced printer. In order to make a good job the whole thing should be set up in one form at first. When the style is approved and the job O.K'd, take one or two proofs of it on dry paper, lift out the portions intended for printing in colors and fill their places with quads, slugs or leads to the exact size of the matter taken out, so that the lines remaining in the key form will not vary from the position they occupied before being disturbed. It will then be a comparatively easy matter to space out the lines of the color form by using the dry proof-sheet as a guide, and almost perfect register can thus be secured.

Covers of price lists or catalogues furnish plenty of ground for the display of artistic designs, and some very creditable work has been done in this direction. But what has been done need not deter the rising generation of printers from showing us what they can do, for it is possible they may as much excel printers of the present as those of the present have excelled those of the past.

Catalogue, price list and table work have already been treated of in former articles, and though there are many other matters relating to a printer's education that might be touched upon or referred to, it is much better that they should be practically illustrated and explained, and very few printers will refuse to show a learner how to do work which may perplex him.

By gaining all the information possible in relation to their work, and experimenting in order to prove the correctness of the same, the rising generation of printers should be well fitted to take the place of the veterans, who will soon be called upon to quit forever the frames they have so long occupied. Let your aim be to excel in everything, and your rule of action that "whatever is worth doing at all is worth doing well."

TRIBUTE TO THE PRESS.

THE Board of Management of the New Orleans Exposition has promulgated the following tribute to the press of the country:

The management of the World's Exposition desires to express to the press of the country and of the world its profound appreciation of the active interest it has taken in the World's Industrial and Cotton Centennial Exposition, and of the invaluable aid it has so cheerfully and gratuitously rendered the great enterprise.

Manifestly it is quite impossible to advertise an international exposition in all the papers of even the United States without the expenditure of vast sums of money in excess of the amount available, and the management feels called upon to make this explanation to the press in order that it may understand why the Exposition has not been placed before the world in the ordinary way of advertising.

The extraordinary and most generous spirit shown by the press everywhere in furthering the Exposition, and in aiding to make it a World's Fair in the broadest sense of the term is most gratifying, and the director-general takes this occasion to return his grateful thanks therefor.

Two suites of rooms, six apartments, have been set aside in the Main Building for the use of the press, as reception rooms, library and headquarters, and space has been designated adjoining Music Hall and on Music Hall Gallery overlooking the main entrance of Main Building for the accommodation of such representatives of the press of the world as may honor us with their presence.

THE government printing-office will receive sealed proposals for furnishing paper for the public printing until January 14, 1885, under the following conditions:

Proposals to be opened before, and the award of contracts to be made by the Joint Committee of Congress on Public Printing to the lowest and best bidder for the interests of the government, the committee reserving to itself the right to reject any and all bids, as its judgment of the best interests of the government may dictate. The contracts will be entered into for supplying such quantities of paper as may be needed during the year, and no more. The estimated quantities set forth in detail in the schedule comprise: 50,000 reams machine-finish printing paper, 24 by 38; 5,000 reams machine-finish printing paper 38 by 48; 6,000 reams sized and super-calendered printing paper, 24 by 38; 1,000 reams sized and super-calendered printing paper, 38 by 48; 5,000 reams sized and super-calendered printing paper, different sizes; 6,000 reams sized and super-calendered printing paper, 24 by 32; 8,000 reams sized and super-calendered printing paper, different sizes; 4,500 reams sized and super-calendered, white or tinted printing paper, different sizes; 5,000 reams map paper, different sizes and weights; 29,500 reams white writing paper, different sizes and weights; 5,300 reams colored writing paper, different sizes and weights; 1,700 reams cover paper, different sizes and weights; 1,000 reams manilla paper, different sizes and weights; 100,000 pounds of best plate paper, different sizes and weights; 600 reams Anchor tissue writing paper, 20 by 30; 65,000 sheets imitation parchment, different sizes; 900,000 sheets glazed bond paper; 1,000,000 sheets card-board, different colors, sizes, weights, etc.

POOR RICHARD'S ALMANAC.

N Parton's life of Franklin occurs an interesting chapter about the famous "Poor Richard's Almanac":

Every printer in the colonies appears to have published an almanac. In December, 1732, Franklin gave the Pennsylvanians the first number of that most renowned of all almanacs, Poor Richard, price five pence. It was a rare success. Three editions were sold in a month. The average sale for twenty-five years was 10,000 copies a year. And now, after the lapse of a hundred and thirty years, we find persons willing to give \$20 for a single number, and several hundred dollars for a complete set. Nay, the reading matter of several of the numbers has been republished within these few years; and that republication already begins to command the price of a rarity. Most of the colonial writers, after 1733, quote Poor Richard, all of whose choice utterances were reprinted over and over again in the colonial press, from Boston to Charleston. Mrs. John Adams quotes him in one of her admirable letters of 1777. "That saying of Poor Richard," she says, "often occurs to my mind: 'God helps those who help themselves."

Franklin wrote the preface for each almanac as it appeared annually for twenty-five years. "The ninth preface descants upon the rivals *Poor Will* and *Poor Robin* which the success of *Poor Richard* had called into being, and ridicules the rage of his enemies, but all in the most perfect good humor."

The great sale of the first number of *Poor Richard* placed at command of the printer thereof a little superfluous capital, which he invested wisely. One of his journeymen he sent to Charleston, where there was no printer, and furnished him with a press and type, on condition of receiving one-third of the profits of the business. The scheme succeeded, and he afterward promoted many of his best workmen in the same manner. "Most of them," he remarks, "did well, being enabled at the end of our term (six years) to purchase the types of me and go on working for themselves, by which means several families were raised. Partnerships often finish in quarrels; but I was happy in this, that mine were all carried on and ended amicably, owing, I think, a good deal to the precaution of having very explicitly settled in our articles everything to be done by, or expected from, each partner, so that there was nothing to dispute, which precaution I would therefore recommend to all who enter into partnership."

In 1736, when he had been several years in business, and had given proof upon proof that he had the best head in Pennsylvania, he was thought worthy to serve the public in no higher capacity than clerk to the General Assembly, the legislature of the colony, an office of little emolument and no great honor. The place, however, was advantageous to him, as it secured to him the public printing. The first year, he tells us, he was elected unanimously, but the second his election was opposed by an influential member who had another candidate in view. Franklin, nevertheless, was chosen.

Franklin held the post of clerk to the assembly for more than fourteen years. The year after his first election he was appointed post-master of Philadelphia, an office that was valuable to him only as affording better facilities for procuring news and distributing his Gazette. These two offices gave him advantages over all other printers and editors. Thenceforward he had nothing to do but hold on the even tenor of his way, and wisely use what he easily gained.

In another article we shall give some specimens of the wit and wisdom of "Poor Richard's Almanac."

RAPID STEEL PLATE PRINTING.

One of the latest official acts of the late Secretary Folger was the signing of an order adopting a new system by which the steel engraved securities of the government are executed on a steam rotary press. Results have been obtained by this press which it was thought impossible to accomplish, namely, the printing from a steel plate, curved on a cylinder, which is inked, wiped and polished automatically. Until this invention was perfected, after sixty years of experimenting, printing from steel-engraved plates was done on hand presses. It was not possible to turn off more than 500 sheets on a press daily, and the plate

had to be wiped, polished and inked after each impression, and two people were required to do the work. On the new press one man can work off 1,200 or 1,500 per hour, or 10,000 per day, the number being limited only by the skill of the feeder. It has been adopted for the bureau of printing and engraving for the treasury department, after three years' trial, although foreign governments have used the same for several years. The press is now in use in the government printing offices in Berlin, St. Petersburg and Stockholm. It has been necessary for protection to carry on experimenting and construction privately, and the first exhibition was given on the 9th inst., to members of the press, at the Homer Lee Bank Note Company's works, Nos. 565 and 567 Broadway, New York, where it is now printing United States postal notes. The steel plate remains fixed in the press and forms a segment upon the surface of the cylinder, to which it clings and curves. The plate receives the ink from a series of rollers which it passes in its continuous revolution. Opposite this inking apparatus is the impression cylinder; extending over this is the blank sheet of paper firmly held by grippers. Every third recover the plate arrives opposite it, and the pressure applied takes from the engraved lines of the steel plate the ink, which has been deposited and left there, after the surface has been polished by four ingeniously contrived pads, that do the work as well as can be done by the hands of a skilled workman. Although the press weighs nearly ten tons, it is so well balanced that it can be run by a half-inch belt, or one-half the width of an ordinary sewing machine belt, and at a cost, it is said, of only two and a half cents per day.

COLOR PRINTING.

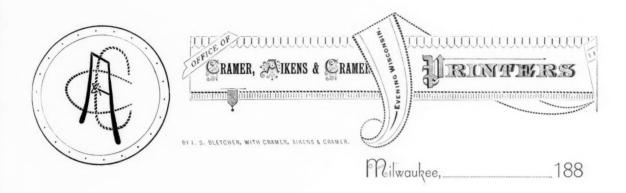
The Universal Printing Company, London, have recently introduced a process, called after its inventor the Hoeschotype, for the photographic reproduction of colored pictures. Five colors are used in this process—yellow, red, blue, gray and black; these five form the base of a large key map of tints, each one divided into five grades, containing, so to speak, respectively one, two, three, four and five fifths of any of these colors. In combining these tints by printing two or more above each other, a large variety of over 1,600 shades are produced; the colors must, of course, be transparent for this purpose.

To reproduce a picture, for instance a portrait, the painted original is at first photographed and copies printed. One of these copies is now taken in hand by an artist, who by means of his color scale ascertains for each spot in the picture the amount of yellow contained, and he covers that particular spot with an equivalent shade of gray, painting out with white at the same time all those parts of the photographic print which in the picture are to contain no yellow. This process finished, a negative is produced from this painted sheet, and a print taken on sensitized gelatine mounted upon plate glass. It will be understood that this gelatine print only represents a picture of those parts in which the artist wishes yellow to appear, and in different degrees of density. In other words, after this gelatine is washed and rolled up with yellow transparent pigment, an impression can be taken from it on paper.

In a similar manner gelatine printing surfaces are prepared of the rest of the colors—red, blue, gray, and finally black; they are all printed one above the other on one sheet in perfect register, and the result is a reproduction of the original colored picture, as near as the skill of the artist who prepared the copies for the colored plates and the perfection of pigments will admit. Tedious though this process appears, and depending as it does on the skill of an artist, the result is admirable. The glass plates carrying the gelatine film are placed upon the bed of what appears a well built litho press. The ink used is very stiff, and the inking operation, performed in the usual way by rollers, is repeated twice for every one impression to insure perfect distribution. The sheets are laid on to exact register, and printing by power is performed at the rate of about one hundred copies per hour. The presses are capable of printing up to 25 by 35 inches in color, and if smaller subjects are worked, two or more can be placed on one plate.

Messrs. Pears, of London, of soap renown, on the occasion of the late Lord Mayor's Show, offered \$2,500 to the authorities if they would allow the three elephants in the procession to be painted white with words "Pears' Soap" in red on the sides. The proposition was declined,

SPECIMENS FOR COMPETITION.







TYPE

P.E.M.C.I.L.I.M.G.S

8A,24a

YES. HE. YEAR IS growing Dld And his eye is bale and bleared! Death, with frosty hand and cold, Plucks. the old Man by the Beard!

YEC-the Year-ig-growing Dld And hig eye ig bale and bleared! Death-with-frosty-hand-and-cold, Plucks the old man by the Beard!

Through-woods-and-Mountain-Passes The winds like Anthems roll; They are chanting solemn masses, Singing "Fray for this poor Soul!"

And the Hooded Cloude like Friars, Tell-their-heady-in-dropg-of-Rain, And patter their doleful Prayers! But their Frances are all in vain!

And the Hooded Clouds like Friars, Tell-their-beads-in-drops-of-Aain, And patter their doleful Prayers! But their Prayers are all in vain!

THERE HE STUHLE in the foul weather, THE fooligh fond Dld Year! Prowned-with-Flowerg-and-with-Heather Like-weak-despised-Lear!

Mahel E. Cawthorn.

Daniel A. Knox.

ESTABLISHED IN 1861.

A. ZEESE & CO. ELECTROTYPERS,

Relief Plate and Photo-Engravers,

155 & 157 DEARBORN STREET, CHICAGO.

Every description of work in our line executed promptly, in the best manner, at moderate prices.

For specimens of our work, we refer to THE ELECTROTYPE JOURNAL published by us, showing the

LATEST and CHOICEST DESIGNS of CUTS, ORNAMENTS, BORDERS, Etc.,

WHICH HAVE A MARKET IN BOTH HEMISPHERES.

Estimates and information on work in our line cheerfully furnished.



HET.

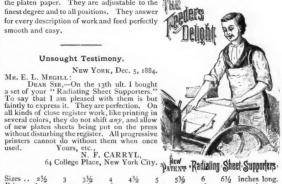
The Radiating Sheet Supporters.

Is the latest and best device in the world for feeding and registering paper, cards, envelopes, etc., on platen printing presses.

They are made in nine sizes and are adapted to any make or size of press Anyone can affix them to the platen by hand where they will remain ready for

They hold rigidly, and do not damag the platen paper. They are adjustable to the finest degree and to all positions. They answer for every description of work and feed perfectly smooth and easy.

Unsought Testimony.



3 3½ 4 4½ 5 5½ 6 6 6½ inches long. 2.55 2.60 2.65 2.70 2.75 2.80 2.85 2.90 complete set. 7x11 8x12 9x13 10x15 11x17 12x18 13x19 14x22 press.

These prices include the Side Supporter.

E. L. MEGILL.

PATENTEE AND MANUFACTURER,

60 DUANE STREET, NEW YORK.

HEADQUARTERS FOR MEGILL'S PATENT,

Brass Gauge Pins, 40c. per doz.
Adjustable Steel Gauge Pins, 60c. per doz.
Spring Tongue Gauge Pins, \$1.20 per doz., 40c. per set.
Improved Extension Feed Guides, \$1.00 per set.

Wire Gauge Pins, 25c. per doz. Lightning Sheet Adjusters, \$1,20 to \$2.00 per set. Radiating Sheet Supporters, \$2.50 to \$2.90 per set.
Parallel Feed Guides. Prices according to style of press.

ESTIMATES FURNISHED.

Established 1804.

ORDERS PROMPTLY

FARMER, LITTLE & CO.

NEW YORK: 63-65 Beekman St. TYPE FOUNDERS.

NEWSPAPER DRESSES.

OUTFITS.

Cast from the BEST QUALITY BOOK AND NEWSPAPER

For Wear, Accuracy and Finish, EXCELLED BY NONE.

—OUR ORIGINAL DESIGNS—

In JOB, DISPLAY TYPE and SCRIPTS are so varied that we can fit out a Complete Office in our own type.

Type of other Founders furnished when desired.

Printing Presses, Printing Inks, Paper Cutters.

ON HAND, A FULL LINE OF

CASES, CABINETS, STANDS, GALLEYS, IMPOSING STONES,

CHICAGO BRANCH. CHAS. B. Ross, Manager. (No.154 Monroe St.

GEO. E. LLOYD & CO.

MANUFACTURERS OF

FOLDING MACHINES,

ELECTROTYPE AND STEREOTYPE MACHINERY,

GENERAL PRINTERS' MACHINISTS,

68 WEST MONROE ST., CHICAGO.

H. McALLASTER & CO.

IMPORTERS OF AND JOBBERS IN

ADVERTISING CARDS,

FOLDERS, BEVEL EDGE CARDS,

Novelties, Scrap Pictures, Fringed Goods, &c.

196 & 198 CLARK ST., CHICAGO.

Illustrated Catalogue sent free to any Address.

Liberal discount to Printers.

JOHN ANGUS, Pres't. FRANZ GINDELE, Manager.
CHAS. W. GINDELE, Sec'y and Treas.

THE

FRANZ GINDELE PRINTING CO.

Printing in all Modern Languages.

FACILITIES FOR ALL KINDS OF WORK.

140-146 MONROE ST., CHICAGO.

Telephone No. 62.

CHICAGO NEWSPAPER UNION

NEWSPAPER

PRINTING, FOLDING & MAILING

Done upon Short Notice, and at Reasonable Prices.

NEWSPAPER WORK OF ALL KINDS A SPECIALTY.

271 & 273 FRANKLIN STREET.

E. P. DONNELL & CO.

MANUFACTURERS OF

BOOKBINDERS' MACHINERY

OF EVERY DESCRIPTION.

158–160 SOUTH CLARK STREET, CHICAGO, ILL. SUBSCRIBE FOR

THE INLAND PRINTER,

\$1.50 A YEAR.

COFFIN, DEVOE & CO.

IMPORTERS OF

B-R-O-N-Z-E-S

GOLD, SILVER AND FANCY COLORS.

Price, from \$1.00 to \$6.00 per Pound.

176 RANDOLPH ST., CHICAGO.

SUBSCRIBE FOR

THE INLAND PRINTER.

\$1.50 A YEAR.

BOSTON. EST.

ESTABLISHED 1830. NEW YORK.

J. H. BUFFORD'S SONS,

LITHOGRAPHIC ART PUBLISHERS.

Works at Harrison Square, Mass.

WESTERN BRANCH,

Nos. 156 & 158 Monroe Street, CHICAGO.

ROBERT J. LESTER, MANAGER.



CLAUDE D. MYERS,

MANUFACTURER OF

ENVELOPES & FINE STATIONERY.

SPECIALTY: BEVELED EDGE CARDS

OF ALL SIZES.

164 RANDOLPH ST., CHICAGO.

W. B. CONKEY,

BOOKBINDER.

PAMPHLETS MY SPECIALTY.

163 AND 165 DEARBORN STREET,

CHICAGO.

SNIDER & HOOLE,

BOOKBINDERS' MATERIALS,

152 MONROE STREET, CHICAGO.

101 & 103 WALNUT STREET,
CINCINNATI, O.

STANDARD NEWSPAPER UNION.

"A NEW BROOM SWEEPS CLEAN."

Partly Printed Sheets equal in all respects to those of

any older house.

FOR TERMS AND SAMPLES WRITE TO

STANDARD NEWSPAPER UNION, CHICAGO, ILL. SUBSCRIBE FOR

THE INLAND PRINTER,

\$1.50 A YEAR.

an



ZINCOTYPE, BY R. BENECKE.

FROM THE ORIGINAL STIGMATYPE IN POSSESSION OF THE CENTRAL TYPE FOUNDRY, ST. LOUIS, MO.

THE Zincotype is a relief plate obtained by first taking a negative of any drawing, etc., which, however, must be in black and white; then by coating a well polished zinc plate with bichromatized albumen, drying it, exposing it under the negative, rolling it up in fatty ink, developing and etching it, eating away the non-exposed parts with

diluted nitric acid until sufficient relief is obtained, the Zincotype is the result.

The Stigmatype is a printing block made from dots of different diameters, somewhat like the mosaic work of the ancients.

Mr. Benecke's location is 605 Chestnut St., St. Louis.

Written for THE INLAND PRINTER.

NOTES ON WOOD ENGRAVING.

BY S. W. FALLIS.

IV.

THE ink with which the cuts in the "Biblia Pauperium" (or "Poor Preacher's Bible" as it is frequently called), have been printed, is evidently a kind of distemper of a brownish hue, but lighter in color than that used in printing the "History of the Virgin," and darker than in the "Apocalypsis." The ink in all the block books seems to have been applied to the cuts by means of a brush, and the impression made by means of friction on the back of the leaf, which is plainly evident from the glossy or smooth appearance immediately behind the relief engraved work, while the intaglio portion does not have the appearance

of undergoing any friction whatever.

The manner in which the cuts in the "Biblia Pauperium" are engraved, and the attempts at shading effects, induce and justify the conclusion that the book is not as old as either the "Apocalypsis" or the "History of the Virgin."

By carefully investigating different opinions and pretended proofs, and in the absence of any positive dates, Jackson is of the opinion that this "Biblia Pauperium" is the production of Dutch or Flemish artists, sometime between 1440 and 1460.

Two manuscript copies of a work from which the engraved "Biblia Pauperium" is but little

more than an abstract, are in the National Library at Paris. The work seems to have been known in France and Germany long before block printing was introduced; hence the "Poor Preacher's Bible" as printed from engraved blocks was simply a cheaply multiplied form of producing a work of uncertain date.

The book usually called the "Speculum Humanæ Salvotionis"—the Mirror of Human Salvation—which is credited by Junius to Lawrence Coster, has been the subject of more frequent discussions among bibliographers and writers, who have made a study of the origin of printing than any other work. These discussions and speculations are so varied without any definite facts to sustain any of the theories advanced, and as there are no positive proofs of when, where and by whom it was produced, we shall not dwell on this point, but endeavor to give some description of the book itself, which is a positive and existing fact.

The "Speculum" is a small folio without date or printer's name. There are four editions known, and all contain the same engravings. Two of these editions are in Latin and two in Dutch.

The Latin editions contain sixty-three leaves, five of which are occupied by a preface, and on the other fiftyeight are printed the cuts and explanatory text.

The Dutch editions contain the same number of cuts, but have only sixty-two leaves, the preface occupying but four leaves in all the editions. The leaves are printed on one side only. Besides the four editions above referred to, that have been ascribed to Coster, and have commanded so much controversy, there are three or four others in which the cuts are more coarsely engraved and in all probability executed in Germany at a later period. There

is also a quarto edition of the "Speculum" containing the same identical cuts as the four folio editions credited to Coster, and printed by John Veldener, at Culenborg, in 1483.

The four controverted editions are supposed to hold a middle place between block books, which are wholly executed, both cuts and text, by the wood engraver, and books printed with movable types, for in three of the editions of the "Speculum" the cuts are printed by means of friction as in the earlier block books, while the type impressions have been printed by means of a press, and in the other of the four editions

d

tl

da amthoirs ad prindairs talindairs laa.

Fig. 6.

the cuts are printed as the other three by friction, and also twenty pages of the text are printed from engraved wood blocks in the same manner, while the text on the remaining pages is printed from movable type by means of a press.

There are fifty-eight cuts in the "Speculum," each of which is divided in two sections by a slender perpendicular column in the center. The cuts in all the sections are placed at the top of the page, and underneath them in two columns is the explanatory text. Under each section, in the small parallel tablet between base of columns, the title of the subject is engraved on the block in Latin.

The accompanying, Fig. 6, is a fac-simile of the right hand section of the first cut in the "Speculum."

The title of the subject, as is the case in all the cuts, is engraved in the tablet beneath. The subject in Latin, and translated reads, "God created man after his own image and likeness." The first two lines

in the explanatory text underneath this cut are when translated: —

"The woman was in paradise for a man a help meet made, From Adam's rib created as he asleep was laid."

The cuts in all the editions are printed in a light brown color, which has been mixed with water and readily yields to moisture, and the impressions undoubtedly have been made by means of friction, as in the other and former block books, while the lower part of the pages of the editions that have the text printed with movable types do not bear the appearance of friction printing, and the ink with which the text is printed is full-bodied and compounded with oil.

The plan of the "Speculum" is similar to that of the "Poor Preacher's Bible," and is equally entitled to be called a "History of the Old and New Testament." A number of the illustrations in the two books are treated in a similar manner, but Jackson says that the design in no single instance is the same. The most of the subjects are from the Bible or the Apocrypha, yet there are two or three of the illustrations which the designer has taken from profane history.

The editions of the "Speculum" here referred to are only a portion of a larger work with the same title, and illustrated with similar designs which had been known long before, in manuscript. Heineken says he has seen a copy in the Imperial Library at Vienna, which appeared to belong to the twelfth century. The manuscript work complete contained forty-five chapters in rhyming Latin, prefixed by an introduction containing a list of them; each of the first forty-two chapters contain four subjects, the first of which is the principal subject, and the other three illustrative and descriptive of the first; to each of the chapters were two drawings, which as in the printed editions consists of two sections. The last three chapters each contain eight subjects, and each subject is embellished with a design. The whole number of separate illustrations in the work was one hundred and ninety-two, while the printed folio editions contain but fifty-eight cuts, or one hundred and sixteen separate illustrations.

Though the "Speculum" from the time of the publication of Junius' work in 1588 had been claimed for Coster, no writer either for or against the claim particularly directed their attention to the manner of the execution of the work until Fournier, who in 1758 in his "Dissertation on Origin and Progress of the Art of Wood Engraving," published some particulars respecting the "Speculum," which induced Meerman and Heineken to speculate on the priority of the different editions. However, Mr. Ottley has proven to a certainty that the suppositions of both the above writers regarding the priority of the editions of the "Speculum" are absolute errors.

(To be continued.)

To improve India ink for drawing, so that even the thickest lines will quickly dry, add one part of carbolic acid to eighty of the India ink. If, by mistake, too much has been added, it may be rectified by putting in more India ink. If the mixture is properly performed, the ink is as easy to draw with as it is without carbolic acid, but dries quickly, and may even be varnished without discharging.

THE POOR OLD PRINTER.

BY S. T. BATES,

A poor old printer stands silent and glum, With types well pois'd 'tween finger and thumb, And eyes slanting up expressive of doubt If the words he has set are clearly made out, And a look on his face that tells of his scorn Of the old fashioned quill and ink in a horn, And the scrawls on his copy, meant to be words, That look like the tracks of snails or of birds.

He strains his eyes, and rubs up his hair,
He bites his mustache, and searches with care,
But patience and learning and good natured will
Won't turn into sense these words with a quill.
He peers up and down for the cap letter O
As a key to the noun that puzzles him so—
He spies out a letter and has it he thinks,
When, lo! it's an in the spelling of sphinx!

He rubs up his glasses and starts off again
To get at the thread of the intricate train,
And a tear trickles down on the end of his nose
As he carefully quarries the words of the prose.
He's doubtful of p and the f and the j—
"They're made just alike!" he whispers to say—
"Writ with blue ink on the end of a quill
By a government clerk, with his usual skill!"

He reads along further to get at the gist, And scans very closely each pothook and twist; But he finds that the q is made like the g, And the r and the v exactly agree; And as to the caps, why the f is an I, And that H is an A there's none will deny; For the F he has T, and sometimes the L, And which one is meant he can't always tell.

He finds, now, an l that it looks like a l, And an i undotted, which answers for e; And the u and the u are always alike, And look just as though they were made with a pike. If he wishes for h, it's a very good k, But that never stands very much in his way; But the a and the a, when made just the same, Are apt to confound in a tough proper name.

You may see how complete is the printer nonplussed, But never can feel his thorough disgust, Nor the dread that awaits the proofreader's skill When the poor fellow's copy is writ with a quill. The characters found on the tombs of Luxore Still live in the hand of Ben Perley Poore, And the artistic script on Belshazzar's wall Is fairly outdone by Bob Ingersoll!

The Lowell and Holmes and Whittier quill Has made the world cry and laugh at its will; But, like gold to the mine, or pearl in the shell, It taketh much labor to quarry it well. The words that are said about each little line You may think are profane or truly divine; But you never may know, nor never can guess What trouble it is to correct for the press!

O, man of great genius! think not of thyself When wooing the muse for honor and pelf, But strive to obtain the printer's good will By writing quite plain, but not with a quill! Think always of him who works in the night By glare and the flare of the hot gaslight, Whose days are all told while yet he is young—Who dieth unknown, while thy glory is sung!

CORRESPONDENCE.

While our columns are always open for the discussion of any relevant subject, we do not necessarily indorse the opinions of contributors. Anonymous letters will not be noticed; therefore our correspondents will please give names—not for publication, if they desire to remain incog, but as a guarantee of good faith.

A CORRECTION.

To the Editor:

INDIANAPOLIS, Dec. 16, 1884.

Your Detroit correspondent, in the November number of THE INLAND PRINTER, conveys the impression, rather vaguely, it is true, that there is something crooked in the office of Carlon & Hollenbeck. of this city. I refer to the printing of the R. L. Polk & Co. Gazetteer. Messrs. Carlon & Hollenbeck did the composition and presswork of the same, and there is not a better union office in the country than this same establishment. F. A. L.

OUR TORONTO LETTER.

To the Editor :

TORONTO, Dec. 23, 1884. Business is very dull in this city at present; in fact, in a worse

position than for a number of years back.

The Mail is being boycotted by the Trades Council, and especially by the Knights of Labor section of the Council. In connection with the Mail boycotting, the Typographical Union took advantage of Sir John A. McDonald's presence in the city, at the Conservative Convention, and appointed a committee to wait on the honorable gentleman and to press on him the necessity of having the Mail (the government organ) rescind their resolution requiring all employés to renounce all labor organizations. They were told by the premier that he would use his personal influence with the managers of the Mail to have the obnoxious resolution rescinded.

The Presbyterian Review, a new religious weekly, has just been

A Milwaukee printer claims to be the oldest continuous typesticker in the United States. Guelph, Ontario, claims the oldest continuous printer in either the United States or Canada. His name is Gordon, and has retired, after having set type for about sixty years. His age is seventy-eight, and he worked for twenty years in one office.

McKay Bros., late managers of the Mail job department, have opened an office for fine printing, and are doing a rushing business.

HOW TO ABSORB THE OVER-SUPPLY.

To the Editor :

WASHINGTON, Dec. 26, 1884.

More and more does the problem, how to find employment for willing hands, call for solution. Closer and closer comes the question, how to relieve the labor market from the over-supply which even in the midst of general activity tends to keep wages below what they should be, and is held as a menace over the working people, who are suspected of not being altogether satisfied with the condition of things prevailing.

Labor-saving machinery makes cheaper the work of flesh and blood. Steel and iron, and steam and electricity have largely taken the place of muscle, of brain, we may perhaps say. Each invention found feasible does the work of many thousands of men, who are then cast adrift, to seek a living in other channels. The result is the large surplus of labor which is reported from every industrial center.

What is the remedy for this? Is there any? Let us see. introduction of machinery obviates the necessity of long hours of labor, and all the work heretofore necessary to be done in ten hours might easily be performed in eight. Why not, then, make eight hours a day's work? Why not? Is there any sound, logical reason why the work on hand should not be divided among those able and willing to do it? I can conceive none. Can you? A general determination to work only eight hours a day would necessitate the employment of a force greater by 25 per cent than is at present engaged in industrial pursuits. I believe that would dispose of the surplus of labor which now threatens the stability of prevailing wages.

How can we carry such determination into practice? By a universal resolve to demand a day's wages for a day of eight hours on and after a certain date. The federation of trades and labor unions of the United States and Canada has taken the initiative by fixing the first day of May, 1886, as the date after which the eight hour law shall go into practical operation. It is a wise determination, and I hope each national organization will at its next session indorse the action already taken. Let every man cease work, let every hammer drop, let every wheel of industry stand still on the May day of 1886, and my word for it, the employers of labor will hasten to acknowledge that eight hours work is sufficient in exchange for a fair day's wages.

FROM NEW YORK.

To the Editor :

NEW YORK, January 4, 1885.

The annual election of the union took place on the 10th ult., and resulted in quite a change of the officers, who are to guide its course for the ensuing year. Thos. J. Robinson, who ran for sergeant-at-arms, was the only officer reëlected, he having polled the largest vote of any candidate - 1,288. Mr. James M. Duncan, of the Herald was elected president, and Theodore C. Wildman, of J. J. Dunn's Publishing House, secretary. The gentlemen who will represent No. 6 at the International Convention are Thos. F. Scully, of the Graphic; Wm. Graydon, Jr., of the Star; Harry Mills Cole, and Sherman Cummin, of the Herald, the former about as well known in Chicago as in New York. The total vote polled shows a falling off of 236 from that of last year, when 2,392 votes were cast; which is not a discouraging showing when we consider the dullness of the past six or eight months. The custom of voting in chapels is still adhered to, and of the 2,156 votes cast, 1,868 were cast in 86 different chapels, showing that there are many offices where the members of the organization are allowed freedom to conduct their affairs without antagonism from the employers. In looking over the list of chapels which failed to vote this year, the most prominent is that of the Tribune, which last year polled 69 votes the voters are still with us, but the enemy has possession of the office. Next is that of the Commercial Advertiser, which had appeared on the lists ever since the system was started, but was "ratted" last August. We also miss Appleton's, which is transferred to the jurisdiction of the new union formed in Brooklyn, and Truth, which has been laid up for repairs. Among the new chapels formed during the year is that of the Concord Publishing Co., a coöperative enterprise, which is so much a success as to be entitled to cast nine votes before it is as many months

Mr. Michael Carroll, president of Chicago Union, has been with us the past few days, and appears to be enjoying himself and making many friends. He was present at a small gathering of printers on Wednesday last, when Mr. John W. Touey was presented with a goldheaded cane by the employés of the Shoe and Leather Reporter, as a token of their appreciation of his services to the union.

The new officers of the union were installed today, and the president by a unanimous vote, was directed to appoint a committee to continue the boycotting of the Tribune for the next year.

i to I for no o 5 I th A to I. (. I by M

sp

in

litt

do

bu

by

OUR PHILADELPHIA LETTER.

PHILADELPHIA, Dec. 28, 1884. To the Editor:

As is always the case at the winding up of the year, business is decidedly flat, but we are assured that with the coming in of the new year things will take an upward turn. Let us hope so. Let us at least look on the bright side, and wear a cheerful face, for I believe as Harriet Beecher Stowe makes one of her characters say, "The smiling face of a pretty girl in the singing seats is often times a means of grace." And so I think if people would look cheerfully at the future, instead of whining about probabilities which, nine times out of ten, never happen, it would be a source of encouragement to every one, and all would be benefited.

The Philadelphia Typographical Union, No. 2, still continues to publish the Tocsin. It has been enlarged considerably, and is now a good sized sheet. It has been indorsed by the Knights of Labor, and the endeavor is to make it the organ of trades' unionism in Philadelphia. No. 2 has also passed resolutions of sympathy with the striking weavers and shoemakers. Our observation convinces us that the shoemakers are ably led and controlled, and that they have practically won their fight.

The weavers feel certain of winning their strike, while the manufacturers say that idleness suits them, because it gives them a chance to work off their surplus stock. The "Peace Society" is doing all it can to have the parties brought together and have the difficulties amicably adjusted.

It is safe to say that there are at least 15,000 men out of work in Philadelphia at this time. A great many unmarried men are uniting with the United States army.

The *Record* and *Ledger* almanacs have made their appearance, looking first class, typographically. We are sorry to see though, by the imprint on the *Record's* title, that Philadelphia, which supports the paper so handsomely, was not permitted to do the printing. It looks as though newspapers, like republics, are ungrateful.

The Ledger, which I have before spoken of as a truly Philadelphia institution, has its work done here, principally at the old and reliable house of T. R. Collins, 705 Jayne street.

Christmas passed off here about the same as Christmas usually does. The way the money disappeared, one would not think there was any stringency in the money market. At Wannamaker's grand depot, where there are 3,500 hands employed, the receipts from sales averaged \$100,000 per day for some time.

Wishing you and the many readers of THE INLAND PRINTER A Happy New Year, I remain,

CWM

FAST TYPESETTING.

Editor Inland Printer: PITTSBURGH, January 1, 1885.

With permission it is my intention to devote a portion of your valuable space to the subject of fast typesetting in the United States and elsewhere, although, from information gathered, one might safely take Chicago alone as the standpoint from which to compare the speed of compositors in all parts of the universe, in other words, some of the nimblest typesetters in the world are located in that city.

What is the quickest on record is the question often asked by those interested. The answer is usually a very indefinite one. By referring to the Clipper Annual the following paragraph will be found: "George Arensberg set 2,064 ems, solid minion, 23 ems to line, one break line to each stickful, in one hour, New York, February 19, 1870. John Henkle set 17,000 solid nonpareil in ten hours, inclusive of one hour for dinner, actual working time nine hours; office of the Blade, Portsmouth, Ohio, August 22, 1882. Benezman set 5,070 ems, nonpareil, ordinary newspaper measure, in three hours; Washington, December 5, 1874." This challenge was published in the New York Herald of February 9, 1884: "As it has been freely announced by members of the craft, especially those employed on the Times, that Mr. George Arensberg can 'beat all creation' in rapid typesetting, I am prepared to back Mr. Joseph McCann, a compositor at present employed on the Herald, in the sum of \$500, to set type against any man in this city (Arensberg preferred), for from three to ten hours. Mannis J. Geary, Ilerald composing-room." Apparently this challenge was not accepted by Mr. Arensberg, and the Herald, in March, claimed that Mr. McCann, set up in one hour eighty-seven lines of minion, or 2,088 ems, thus beating the acknowledged champion's record of 2,064 ems. The work of the above printers is indeed wonderful, especially the feats accomplished by the veteran, Arensberg, who for the past twenty years has been recognized by the members of the craft as a phenomenal typesetter, but Chicago can boast of men equally as clever as the best of those, and, as an instance of marvelous speed, the performances of Mr. T. C. Levy may be reckoned as the quickest known. That gentleman claims having set 2,200 ems solid minion, in one hour, in the Pioneer newsroom, St. Paul, and 102,000 in one week at the Inter Ocean office, Chicago. His statement is verified by good authority.

The United States is famous for its printers, both job and news, and little can be learned elsewhere of the accomplishments of printers; no doubt, Europe and the Antipodes possess craftsmen of a high order, but we have not yet heard from them. The secretary of the London society of compositors names Mr. Harris as the quickest typesetter in England, and gives his record as 6,400 ens in two hours, accomplished by him on a trial at the London Times office. Bob Purcell, a Dublin news compositor is credited with 3,800 ens in one hour. G. W. Chase, an American, employed in the Times office, Cape Town, heads the list

in South Africa with 3,800 ens in one hour. Costigan, a Montreal printer, won first prize at a type-setting match in London, Canada, with a score of 1,754 ems in one hour. Hindoos and other eastern natives, although fast typesetters generally, cannot be compared with the printers of the West.

The object in writing this letter is to learn more of the deeds of phenomenal printers, and any enlightenment on the subject will be duly appreciated by

FROM GERMANY.

FRANKFORT-ON-THE-MAIN, Dec. 8, 1884.

To the Editor :

Age does not, as a general thing, improve in value the material or machinery of a printing-office. Usually it takes but a few months, or years at most, to reduce the value of such *plants* to a mere nominal sum, while the real value of the establishment is in the business which its proprietor has built up. But I have recently visited and inspected a printing-office where age does make its value. As part of the curiosities and attractions of the museum at Antwerp, these old relics are shown under the same roof with many of the finest paintings of those old masters Rubens and Vandyke, and it is certainly fitting that it should be so, for what is printing but reproduction, like painting, of that which originates in and flits through the brains.

This old printing-office here referred to, was founded in the year 1565 by Christopher Plantin. At his death there was in his printingoffice about 45,000 lbs. of type in seventy-three different kinds or fonts. He had in use at this date seven presses, which number was increased to fifteen in the year 1575, and twenty-two in the year following. This number was afterwards reduced by sale to sixteen. But it must be regarded as a wonderful thing, that at this early day in the history of printing, such a large number of presses could be employed, while the amount of type would be considered large for the use of many offices, even at the present day. There are at this time seven of these old presses preserved in the museum, two of which, by the evident marks of age upon them date back, without doubt, to the time of Plantin. Preserved by his successors as precious relics and installed today on a platform of honor, they are the most revered of these ancient implements of the craft. It is said that this printing-office, in its arrangement - the walls, windows, etc., is the same that it had in 1576.

The museum at Antwerp is established in the building occupied by the old printer Plantin—and his descendants from 1576 until 1876, in which latter year the city of Antwerp bought the building and property with the collections and printing-material it contained. It was then transformed during the next year into a public museum, and many curiosities of art and pictures added. It is now one of the attractions to the tourist at Antwerp.

One who has been accustomed to look about and inspect printing-offices, printing-presses and material, sees many things to interest and instruct while on a short trip abroad, but I doubt whether there is another instance in all Europe where such venerable relics and remains of old printing-material can be found. The cases are covered with glass, the presses free from dirt and dust, and notices are posted up forbidding visitors to touch them. I had often seen mummies preserved in glass cases, but as regards dead and forgotten printers' material, the museum at Antwerp seems a near approach to the Egyptian mummy.

Germany, and especially many points well known and celebrated along the Rhine, would probably be considered as the fountain head—the source of the great art of printing—yet she has long since ceased to be at the front and head of progress in its beauties, and has allowed younger and equally vigorous nations to lead in the art which civilizes the world. I have often wondered what some of the printers in this country would say, could they but see some of the printing-offices in Chicago, and many of the printing-machines in use in that city. There are many of the printers of this country who have never been beyond the confines of their own city or town, and could they but be transported quickly to where they could see some first class American printing-machinery, the astonishment would be great and wonderful to behold.

This city in which I write is much given to money-getting, to literature, printing and type founding. Some of its streets for long

distances are lined with palatial and magnificent looking residences. Its public squares are adorned with statues of Gutenberg, Faust and Scheffer, with statues of Goethe and Schiller, with statues of Bismarck and Kaiser Wilhelm. It has some of the largest printing-offices in Germany, and turns out good work from very slow and clumsy looking presses. It has several good type foundries, one of them, the largest on the continent; and all of them seem to be prosperous. The impress of the old printers and of the art bequeathed to the world can be seen all over this beautiful city.

A. P. I.

TO PRINTERS.

We have received the following communication from Mr. Bateman, of Cincinnati, and trust his request will be generally complied with: Fellow Craftsmen:

Although the production of books has been, for many years, so great as to lead one to infer that all subjects of any importance had been treated; although, further, the last few years have witnessed such a heavy run on books of humor as to make it seem well-nigh impossible that one of the most prolific sources of mirth—and one peculiarly adapted to the risibilities of a numerous body of men whose profession makes them keen-witted—has not even been touched.

Such, however, is the case—at any rate, so far as this country, the home of humor, is concerned—and it is in the attempt to remedy such oversight that this circular is issued.

I am, like the rest of you, a working printer, and what I purpose doing is solely to give our profession as prominent a position as it deserves in at least one department of the world of letters; in which endeavor I call upon every intelligent printer to assist me.

Briefly stated, my purpose is as follows: To collect, as far as possible, all the funny stories, witty sayings, queer happenings, lively items and every humorous anecdote of a technical character, at present floating around the printing-offices of the United States, print them in book form, and supply copies at the smallest possible price. Being in the position of manager of an office—working at the case steadily, though, like the rest of you boys—I have every facility for carrying out my part of the plan, and will do so, if every printer who reads this will do his share.

What that share is—how simple—I will explain: I ask every printer who knows anything humorous, of a technical character, to write it down and send it me as soon as possible—and by all means before March 1, 1885.

As fast as the contributions are received they will be set, and as soon as possible after the date mentioned the book will be printed and issued by me alone—to insure a moderate price for it. Length or brevity will be equally welcome; also curious designs, quaint conceits, etc. Music type can be brought into use if necessary.

The work will contain an acknowledgment of every contributor's services.

Gentlemen, my slug's on the slate. I'm waiting for copy.

Yours, fraternally,

GEORGE W. BATEMAN,
206 Race St., Cincinnati.

A HAIR'S THICKNESS.

A curious little machine in the office of the chief of the stamp bureau of the postoffice department is the cause of the cancellation of the contract of the New England firm with the government for furnishing envelopes to the postoffice department. It is a queer looking contrivance, a cross between a set of butchers' scales and the ordinary grocers' scales, or rather a combination of the two. There is a large dial, like the face of a clock, with the little hand that flies around the face pointing to the figures at the side, which arranged like the figures on a clock face, with little dots between. "You see them dots?" said the gentleman in charge, inquiringly. "Well, the space between these indicates I 16-1000th of an inch. Getting it down pretty fine, isn't it? You see this movable piece of iron here which comes down with a smooth surface upon this other solid surface? Well, the raising or lowering of that moves the pointer which runs around the dial. To test the thickness of a sheet of paper we simply place it between this movable piece and the solid surface below, and when the movable piece of iron comes down upon the paper the hand registers the true thickness of the paper. Delicate instrument? Well, I should

think so. Just give me a hair from your head, will you?" Then he took a hair and slipped it deftly between the movable pieces. The hand of the dial followed the motions of the screw until it stopped at the figures twenty. "Just 20 16-1000ths of an inch in diameter," he said. "Now let me try a hair from your mustache. They are generally much larger, especially if you have been in the habit of shaving." He took up a pair of scissors and clipped off a hair from the mustache and placed it in position. The hand stopped at fifty. "50 16-1000ths of an inch thick," he said. "That shows the effect of shaving. I measured a hair from the hand of a gentleman a few minutes ago which was 40 16-1000ths thick, but those in his mustache were precisely the same thickness, the reason being that he had never shaved. Yes, that is the machine that proved that the firm making our envelopes was not fulfilling its contract," he said, as he fell back admiringly. "By this dial we can see just the thickness. By this lever, which is very much like a pair of grocer's scales, we can tell just what pressure the paper will stand. You see we have two other movable pieces of iron here, with a hole entirely through both and a plunger which passes through that hole. Well, we put the paper between those pieces which, when pressed tightly together by the lever, hold it firmly. The plunger, which passes through the opening in the two pieces of iron, encounters this paper thus firmly held. To know what the pressure is we have the plunger attached to a scale lever with a weight attached like an ordinary pair of scales, and by moving this weight out along the lever until the paper breaks, of course we can see just what the weight is that made it break. See? Very simple, after you understand it. Well, that is what the papermakers thought after they had lost an \$80,000 contract by it. It was a new thing to them, but they acknowledged that they were beaten when they saw it." This delicate instrument, only recently invented, is a companion piece to the scales in the assayer's office of the treasury, by which the weight of a hair is accurately tested .- Washington Post.

PLEASE OBSERVE.

During the month of December we received no less than four hundred and thirty-seven applications for specimen copies of THE INLAND PRINTER, excepting forty-nine, none of them contained an inclosure. The price of THE INLAND PRINTER is fifteen cents per copy, and those desiring to obtain one will kindly remit that amount, otherwise their request will be unheeded. We feel that we have dealt very liberally in this direction, and anyone who desires the benefit of our efforts should furnish their mite to sustain us. Our publication is costly, and we cannot afford to distribute gratuitously that which costs time, brains and money to produce. We also take this opportunity to intimate that it is indispensable that the subscription price accompany every order.

Among the list of veteran typos in Albany, N. Y., are the following, many of whom have been at the case for over a quarter of a century, and in one case especially-that of James Hoyland, foreman of the Daily Press and Knickerbocker-over half a century, his first stickful of type having been set in 1833. The other veterans are: Col. John Hastings, 1840; Major James Macfarlane, 1842; Charles Woorster, Wm. Johnson, James H. Carroll, Myron H. Rooker, 1840; A. F. Chatfield, 1834; Jacob Winnie, 1840; Elias Hawley, 1834; Henry C. Winne, 1845; Danniel Manning, 1848; John G. White, 1820; Hugh McGrath, Avery Herrick, Cornelius Halloran, George Tice, John McKenna, Wm. A. Carroll, Robert Sherman, John T. Donnelly, William Walls, Isaac Pitcher, Edward Siples, Walter McCulloch, Peter Le Paige, William Lee, Dennis Feehan, Thomas Palmatier, Abe Van Patten, James Hughes, Frank Freckleton, John Parr, Francis Withers, Wm. H. A. Rooker, James Walker, George Walker, Robert E. Hart, Charles Gilmore, Geo. Chapman, Frank Burrill, Philip Steele, Edward Henly, J. H. Casey, 1830-51; H. Hopeland, Albert Bigley, Charles Staats, 1844; George Quackerbush, 1840; Thomas Doyle, Thomas Willard (now chief of police), Thomas Ward, William Leonard, Robert Manning, Andrew Murphy, Martin Curtis, Alex. McKenzie, Timothy D. Strong, Jesse De Forrest, Michael O'Brien, Richard J. Bigley, Daniel Winne, Joseph Byers, Jos. Thornton, P. F. Bray, P. O. Keyser, Michael Riley, Wm. P. Johnson (now president of the printers' union), John McMahon and Christopher Healy .- Albany (N. Y.) Press.

Tapeless

Sheet

Handsome, Delivery,

and Guaranteed Perfect

172 Rapid, all

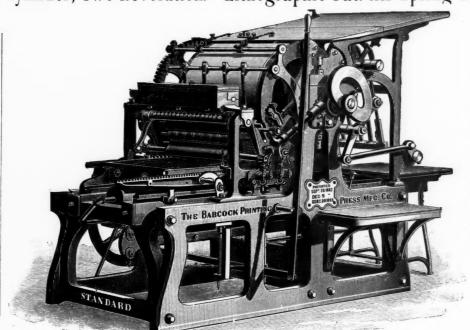
respects Strong,

Register,

BABCOCK PRINTING PRESS MFG. Co's

Drum Cylinder, Two-Revolution Elithographic Pat. Air-Spring Presses.





BABCOCK "STANDARD" PRESSES.

These Presses are built from new designs combining strength and durability with increased capacity for speed, and embody several new and very important im-

increased capacity for speed, and embody several new and very important improvements, among them the following:

NOISELES GRIPPER MOTION, with PERFECT REGISTER. AIR VALVE, for removing the spring when desired, and invariably restoring it when the press is started. THE SHIELD, which effectually protects the Piston and Cylinder from paper, tapes, etc., that might fall upon them and produce injury. THE PISTON can be adjusted to the size of the Air-Cylinder, so that the wear of either can be easily compensated. This easy, positive and perfect adjustment prevents leaks and vacuums and secures evenness of wear in the Air-Spring. THE ROLLER-BEARING has the following advantages: Any single roller may be removed without disturbing the others. All of the rollers may be removed and replaced without altering their "set." When

desired, the form rollers may be released from contact with the distributor and type without removing the rollers from their bearings or changing their "set." The Ink Fountain is set very high, allowing easy access to the forms, and furnishes much better distribution than the old style. These presses have PATENT POSITIVE SLIDE MOTION and PATENT BACK-UP MECHANISM, and are equal to any first class presses in the market

SIZES AND PRICES OF "STANDARD" PRESSES.

ı	No. 1,		19 x 24\$1,150.00	No. 5, Size bed	29 X 42\$2,0.0.00
Ł	2,		22 X 26 1,400.00	6, "	32 x 46 2,200.00
	3,		25 x 31 1,600.00	7, "	33 x 51 2,350.00
	4,	6.6	27 x 38 1,800.00		36 x 53 2,700.00
			No. o. Size bed 38 x	\$6\$2.200.	00

THE BABCOCK NEW TWO-REVOLUTION PRESS

DELIVERS THE SHEETS IN FRONT PRINTED SIDE UP.

In bringing out a series of Two-Revolution Presses, the BABCOCK PRINTING PRESS MANUFACTURING Co. has sought to not only combine the best features known in other machines of this class, but also to add a number of valuable improvements which greatly increase the durability, usefulness and convenience of these Presses. In addition to the general features of the Babcock Drum Cylinders enumerated above, the Two-Revolution Presses deliver the sheet in Front printed side up, without the use of either fly or swinging arms. They also have the new backing-up motion, ena-

bling the pressman to back up his press while the belt is on the loose pulley and without the aid of either gears or friction—a most valuable improvement. The mechanism for raising the cylinder is remarkably simple—an important fact when the tendency to wear and lost motion in the joints is considered, and also requiring less power to run. These Presses are made very heavy for speed, and in every respect thoroughly constructed,

THE BABCOCK PATENT AIR-SPRING COUNTRY PRESS.

The best Newspaper and Job Cylinder Press for the price in the market. Size of bed 32 x 46 inches, will work a 6-column Quarto Newspaper without "cramping." It is simple, strong, and in every way splendidly constructed. It combines all the latest improvements for fast and good work, together with beauty in design and Price, \$1,100. Steam Fixtures, \$50 extra.

THE BABCOCK LITHOGRAPHIC PRESS.

This machine has no superior. It is very heavy, and has many improvements, making it a very easy press to handle. In Register, Speed, Distribution of Color and Water, Facility in making Changes, Stillness in Operation, it is ahead of all competitors.

BABCOCK PRINTING PRESS MFG. CO.

BARNHART BROS. & SPINDLER,

GEN'L WESTERN AGENTS.

115 & 117 Fifth Avenue, CHICAGO.

NEW LONDON, CONN.



OSTRANDER & HURE & STREET AND ASSESSMENT OF THE PERFORATION OF THE PER Manufacturers of Type Machinery, Perforating of the Electrolype Machinery, England Programme, Machine, Printers, Chase Street, Machinery, Chase Street, Machinery, Chase Street, Stating etc.

PRINTING PRESS MACHINISTS.

81 & 88 Jackson St. CATICAGO, ILL.



MARDER, LUSE & Co.

TYPE FOUNDERS

ELECTROTYPERS, CHICAGO.



J. B. WIGGINS Enfraver.

WEDDING CARDS, SEALS.

MONOGRAMS, 48 Madison St., CHICAGO.



H. D. WADE & Co's

PRINTING INKS.

MARDER, LUSE & Co. Agents. CHICAGO.



INDEXED MAPS AND GUIDES

All Countries in the World!

WHOLESALE AND RETAIL,

RAND, McNally & Co., Publishers,

Nos. 148-152 Monroe Street,

CHICAGO, ILL.

DOUGLASS, THOMPSON & CO.

Merchants in all Requisites pertaining to the

Art-Science of Photography,

PHOTOGRAPHERS' BOOKSELLERS, STATIONERS, PUBLISHERS AND NEWSDEALERS,

Nos. 229 & 231 State Street,

CHICAGO.

Send for Catalogue.

CAMERON, AMBERG & CO.

MANUFACTURERS OF

Amberg's Cabinet Letter Files. 71 & 73 Lake Street,

SEND FOR CATALOGUE.

CHICAGO.

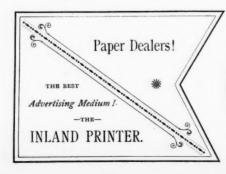
WM. H. RANNEY,

MANUACTURER OF

Printers' Rollers and Roller Composition,

10 AND 12 SEITZ BLOCK,

Entrance, 33 Congress St. West. DETROIT, MICH.



THE WORLDS INDUSTRIAL AND COTTON

* EXPOSITION * NEW ORLEANS.

Opening Dec. 1, 1884. Closing May 31, 1885. H. H. JUDSON, Chief of Department

Type Founders! INSERT YOUR New Specimen Pages INLAND PRINTER.

O'NEILL & GRISWOLD. EDITION BOOK BINDERS.

Especial attention given to Country Orders for Case Making, Stamped Titles, Stamped Backs, etc. SEND FOR ESTIMATES.

Nos. 180 & 182 Monroe Street, CHICAGO.

ELLACOTT & LYMAN,

MANUFACTURERS OF

PRINTERS' LEADS AND SLUGS,

By Patent Process, of Any Desired Length.

NEW AND BEAUTIFUL DESIGNS OF BORDERS ON METAL OF PICA BODIES.

No. 16 Calhoun Place,

CHICAGO, ILL.



% AULT & WIBORG

MANUFACTURERS

PRINTING AND LITHOGRAPHIC INKS

AND VARNISHES.

CINCINNATI, OHIO



RULING, NUMBERING,

PERFORATING AND BOOKBINDING.

DONE FOR THE TRADE.

I. S. McDonald & Co., 140-146 MONROB ST., CHICAGO.

A. P. SANDBERG.

Manufacturer of and Dealer in

Engravers' Woods and Tools,

BOLTED BLOCKS A SPECIALTY,

Office and Factory-Nos. 86 and 88 Dearborn Street,

CHICAGO, ILL.



SAMUEL BINGHAM'S SON.

PRINTERS' ROLLERS,

Nos. 200 & 202 CLARK STREET,

CHICAGO,

ILLINOIS.





British AND Colonial Printer AND Stationer

Booksellers' Circular.

Consists of 16 pages. Illustrated. Every Thursday, Three Dollars per Year.

W.J. STONHILL,

Ludgate Circus, - - - LONDON, ENG.

PHOTO-ENGRAVERS, E. BROWN & CO. 155 & 157 Washington St., Room 34, Send or call on us before placing your orders.



INLAND PRINTER

ENLARGED TO FIFTY-TWO PAGES AND COVER.

\$1.50 PER YEAR.

75c. SIX MONTHS.

SANBORN'S

PAPER CUTTING BOOKBINDERS' PRINTERS' AND PAPER BOX MAKERS

MACHINES

COMPLETE STOCK ALWAYS ON HAND.



SANBORN MACHINES CAN BE SEEN AT 152 Monroe St., Chicago.

GEO. H. SANBORN & SONS, 69 Beekman St., NEW YORK.

Manufactory: Standard Machinery Co., Mystic River, Ct.

J. W. BUTLER PAPER COMPANY,

173 & 175 ADAMS STREET,

CHICAGO,

MANUFACTURERS AND WHOLESALE DEALERS IN ALL KINDS OF

PAPERS

USED BY PRINTERS, PUBLISHERS & STATIONERS.

We respectfully solicit attention to the following popular brands of goods which we carry in stock:

FLORENCE MILLS,

WAWASA MILLS,

LAKE SHORE MILLS,

BUTLER MILLS,

ST. CHARLES MILLS,

FLAT

and RULED

PAPERS.

LEDGER MILLS.

L. L. BROWN'S LEDGER PAPERS.

We also have a full line of

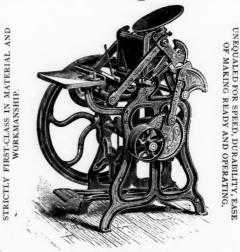
Holiday Cards, Ball Programs, Wedding Goods

OF THE LATEST STYLES.

SPECIAL RULING done and SPECIAL SIZES OF PAPER made to order on short notice.

"PROUTY"

Fob Printing Presses.



(Small 8th Medium.)

Strength and Power without excessive bulk and weight. Simplicity of construction, perfect register, and beauty of design and finish.

For Illustrated Pamphlet and Specimens of Printing, address

THE PROUTY PRESS CO.

52 Federal Street,

BOSTON, MASS.

fire

pri

res

WOL

PERSONALS.

MR. S. A. GIBSON, of Kalamazoo, Mich., paid our sanctum a visit a few days ago.

Mr. D. M. Hyde, of Appleton, Wis., was recently in our city in connection with business interests.

WE regret to learn that Mr. Charles Huke, of the firm of Ostrander & Huke, has been indisposed for several days past.

Mr. JOHN F. CLARK, of the Dickenson & Clark Paper Company, of Holyoke, Mass., recently spent a few days in our city.

MR. PRENTICE C. BAIRD, the well known paper maker, of Lee, Mass., has recently been surveying the business outlook in Chicago.

Mr. A. F. Wagner, of Freeport, Ill., made us a pleasant call during his visit to the city a few days since. Country printers, always call on us. We like to chat with you.

WE regret to state that Mr. Wm. Lindsay, of the Illinois Type Foundry, contrary to the expectations of his many friends, is still unable to attend to business, though he is slowly convalescing.

LOCAL ITEMS.

INGERSOLL & MARSH, printers, 140 South Clark street, recently had their establishment damaged by fire to the extent of \$250.

THE Norway Pulp Company, of Chicago, has been incorporated with a capital of \$30,000, for the purpose of manufacturing wood pulp.

THE Chicago Paper Company, now located at 140 and 142 Monroe street, expect to re-occupy their old quarters, recently burnt out, by the 15th of January.

THE J. W. Butler Paper Company is handling the production of hiteen paper mills, and is doing a good business, considering the dullness of the present times.

MANY of the calendars for 1885, produced by our printing houses, are a credit to the craft and to our city. Some of them are executed in the highest style of the art.

THE LAKESIDE PRESS has been incorporated in this city, with a capital of \$10,000. The incorporators are Arther H. Gilbert, John H. Robinson and George Amberg.

THE Grand Union Printing and Publishing Co., has been incorporated in this city, with a capital of \$100,000; incorporators, Wm. H. Loomis, M. A. Loomis and E. S. Barnum.

E. P. DONNELL & Co., 158 and 160 South Clark street, have organized a stock company, with \$50,000 capital, and commenced business under the new organization Jan. 1, 1885.

OSTRANDER & HUKE report trade improving, and are now filling large orders for their "old style" improved Gordon presses, every portion of which is manufactured in their own establishment.

Mr. J. S. Thompson, who has for some years past been connected with the firm of Hanscom & Co., Madison street, has recently transferred his services to the J. B. Jeffrey Printing Co. We wish him success in his new field of labor.

MR. CHAS. J. JOHNSON, formerly connected with the *Printers' Cabinet*, has formed a co-partnership with H. H. Abbott, under the firm name of Abbott & Johnson, 269 Dearborn street, for the transaction of general job printing.

STATE OF TRADE.—It gives us sincere pleasure to state that since our last issue there has been a decided change for the better in the printing business in this city, and in fact throughout the country. A visit to the business establishments connected with the trade, warrants the gratifying belief that this improvement has come to stay.

AT a recent meeting of the typographical union of this city a resolution indorsing Mr. J. S. Thompson for public printer was unanimously adopted. Similar action was taken by Pressmen's Union, No. 3. Mr. T. is an old Chicago printer, and his many friends would rejoice if the efforts now put forth in his behalf should prove successful.

THE Indexed Maps and Guides furnished by the firm of Rand, McNally & Co., of this city, have achieved not only a national but a world-wide reputation. Employing none but the most skilled artists

and reliable and experienced workmen, their facilities for turning out this class of work are absolutely unexcelled. Their efforts are confined to no country or region. Wherever intelligent investigation has been employed, or reliable data obtained, these results can be secured, and the same given to the world, by application to this firm.

MR. JAS WHITE, the Chicago manager of the Friend & Fox Paper Co., 153 Wabash avenue, states that his firm is in an excellent position to supply all grades of book papers, either wove or laid, and solicits country correspondence. Book and cover papers are its specialty. It issues an extraordinary fine sample book of cover papers, which will be mailed on application.

"YES, it pays to advertise in THE INLAND PRINTER," said an acquaintance to us the other day. "From the notice given me two months ago I have received and executed orders from Austin, Texas, and Oshkosh, Wisconsin; and am now in correspondence with parties in Boston, Louisville, Janesville, Milwaukee and Cincinnati, and have reason to expect orders from all of them."

WE had the pleasure a few days ago of personally examining the working of a model of an automatic paper feeding machine, manufactured by the Sedgwick Manufacturing Co., Poughkeepsie, N. Y., a detailed description of which appeared in our December issue. Its inventor, Mr. A. Sedgwick, who has been spending a few days in our city, combining pleasure with profit, reports that all who have witnessed its operations are highly pleased with it and predict its unqualified success.

A. ZEESE & Co., 155 and 157 Dearborn street, have just issued a tastily executed circular to the trade, calling attention to their unsurpassed facilities for promptly filling every description of electrotyping and stereotyping; also all kinds of maps, plats, diagrams, outline and other engraving, for illustrations, magazines, autographs, etc. With an experience of over thirty years in the business, and possessing one of the most thoroughly equipped establishments of the kind in the country, we take pleasure in recommending them to the patronage of the craft.

THE CHICAGO-MEXICAN FUTURE is the title of a monthly periodical about to be issued in this city by the Chicago Mexican Publishing Company. As stated in the prospectus, it is intended to make it "a purely Chicago publication, which will devote all its energies and powers exclusively to the development of business between the great metropolis of Chicago and the republic of Mexico." The first issue will appear on or about the 15th of January. All communications should be addressed to Room 14, 175 Dearborn street. It is needless to add that The Inland Printer wishes it abundant success.

DURING the month of December two honored members of Chicago Typographical union have resigned the cares and struggles for existence on this never-ending but ever-changing world, and are now peacefully resting in the Union grounds at Calvary and Rose Hill. Daniel J. O'Connell, a compositor for six years on the News, who died of consumption, and Ed. Visser, a well known job printer, who was afflicted with softening of the brain. In addition, W. J. Gardner, a good "comp," and a most exemplary young man, being pronounced by the doctors as dying of consumption, the union, in response to his appeal to be permitted to die at home, made the necessary arrangements, purchased his passage and started him for his kindred in South Lynn, England, by steamer City of Richmond, on Saturday, January 3. The last words he uttered in our hearing was a fervent blessing upon Chicago Typographical Union. Verily, for an organization making no claims to be of a benevolent character, the printers of Chicago have reason to be proud of their union.

A TYPOGRAPHICAL curiosity is to be seen by making a visit to Secretary-Treasurer Rastall's office. In 1854 a printer in the regular army, stationed at Fort Ripley, Minnesota Territory, on leave of absence from the fort, became intoxicated and lost his way in the woods. He was afterward found, badly frozen, and returned to the fort, where it became necessary to amputate both legs. While convalescing, and to while away the tedium of enforced idleness, he had four pine boards brought to him, and with a jack-knife he whittled the face of the boards to produce four pages of a newspaper, which he titled The Bombshell. The body-type is about double great primer in size—

three columns to the page. The contents are mainly of a humorous character, though a portion of it gives the latest news from the Crimean war. The printer made his own wooden legs, and when he could walk about on them, in some manner he manufactured ink, and with an army blanket and planer and mallet he printed a number of copies of this quaint conceit. This particular copy was presented to the Union by Horace G. Boughman, of the Daily News. It is placed in double glass frames for preservation, and is well worth seeing.

OF INTEREST TO THE CRAFT.

THE Labor Press convention meet in Pittsburgh, January 10.

THE Hartford Globe has changed its dress from brevier to leaded nonpareil.

AKRON (O.) UNION has doubled its membership in the last four or five months.

PRESSMEN'S UNION, No. 11, of Cincinnati, has elected H. F. Hopkins president.

The Philadelphia News has been changed from twenty-four to twenty-eight columns.

The $Free\ Press\$ and the $Post\$ newsrooms are the only offices in Detroit closed to union men.

At the recent election of officers of New York Typographical Union, nearly 2,500 votes were cast.

THE Washington Times has changed hands, and will hereafter appear every Sunday as the Washington Phanix.

W. A. O'DONNELL has been appointed receiver in the property of the *Inter Ocean* Publishing and Printing Company, Denver.

THE Baltimore Day, an evening journal, has opened its doors again, and fifteen compositors are now engaged on the paper.

THE Century Company is about to erect a great printing establishment on the corner of Lafayette place and Fourth street, New York.

Members of the press attending the New Orleans Exposition are requested to report at the office of the chief of printing and publishing, 15 Union street.

J. W. CAMERON was elected president and Hugh O'Halaran, H. T. Elder and J. W. Douglass delegates to the International Union by Boston Typographical Union.

PRESSMEN'S UNION, No. 1, has contributed \$25, Topeka Typographical Union \$17.85 and Hartford Typograpical Union \$11.25 for the suffering miners of the Hocking Valley.

WE think our Toronto correspondent carries off the palm in the claim for his sixty-year-at-the-case compositor, mentioned in his letter as having recently retired from active service.

Mr. John Schley, of Indianapolis, Ind., who has twice been a delegate to the International Typographical Union, was elected a member of the Indiana Legislature at the recent November election.

THE Detroit Typographical Union has fitted up a club-room for the printers out of employment, in room 6, Seitz Block. Those desiring to see the financial secretary, or employ printers, will find them there.

JOHN FOSTER HOGAN, present proofreader on the Brooklyn Union, and a well known ex-delegate to the International Typographical Union, is a candidate for commissioner of the National Labor Bureau.

It is stated that the *World* building, New York city, has been declared unsafe by an examiner of the Bureau of Buildings, on account of the flues of the chimneys being defective and dangerous in case of fire.

MR. JOHN F. EARHART, of Columbus, Ohio, whose reputation as an artistic color printer is second to none in the wide world, will surprise his many admirers some day by giving them a work that nothing in this enlightened age has equaled.—*Craftsman*.

PRINTERS are often asked to make estimates for work when a type measure is not accessible. With the following table and the aid of a foot rule, calculations may be safely made: A square inch of pica contains 36 ems; small pica, 40 ems; long primer, 56 ems; bourgeois, 64 ems; brevier, 86 ems; minion, 100 ems; nonpareil, 144 ems. The fractions in this estimate are given in favor of the printer.

CHEAP paper is not always the cheapest for printing purposes. An experiment has shown in 60,000 impressions that by using super-sized and calendered paper only two-fifths of the amount of printing ink was used than for 60,000 impressions on ordinary book paper.

Under our new treaty with Mexico, the paper and ink trade is favored. Books, paper, inks, and rags for paper may be imported into that country from the United States free of duty. This takes a great trade from England and places it where it naturally belongs.

A FULL font of Japanese type contains fifty thousand characters, of which three thousand are in constant use, and for two thousand more there are frequent calls. Each word has a distinct character. The type is disposed about the composing-room on racks, like books in a reading-room, and the compositors wander up and down the aisles, taking exercise and setting type at once.—Scientific American.

An exhibition of rare works of the Ancients has just closed at the rooms of the Grolier Club, located at 64 Madison avenue, N. Y. Perhaps this was the largest and richest display of old illuminated manuscripts ever shown in New York. We pride ourselves, in this nineteenth century, of the artistic style of our books, but placed by the side of these works of the old masters, we have to confess that we are farbehind in real art in book-making, and that we have much to learn before we attain perfection.

THE following gentlemen were elected officers of Typographical Union No. 6 (New York), at its recent election: President, James M. Duncan; Vice-President, John A. Kavanaugh; Secretary, Theo. C. Wildman; Treasurer, James Smith; Fund Trustee, William White; Trustees, Aaron Heywood, Henry Martin; Sergeant-at-Arms, Thomas J. Robinson; Delegates, William Graydon, Jr., Henry Mills Cole, Sherman Cummin, Thos. F. Scully; Alternates, Martin J. Healy, Frank Horn, Frank Fitzpatrick, Thos. Devine.

MR. JAS. N. MATTHEWS, publisher of the Buffalo Morning Express, recently notified his compositors that on Monday, Jan. 5, the rate of composition will be reduced from 35 to 33 cents per thousand. The Express is a staunch union office. The trouble in the office of the Times over the rate paid for the setting of "ads" has been subm to arbitration, the men in the Times office decidedly objecting to being called out. It has been rumored that the publisher of the Evening and Sunday News contemplates putting his "ads" on "by the week."

GEORGE W. BLOOR, who emigrated from Columbus to California in the '50's, is now in Sacramento City, employed in the state printing department. Mr. Bloor first crossed the plains in 1852, starting from Fort Independence, Mo., in the capacity of "bull-driver" and "lead the train" successfully into Sacramento. He was the projector of a number of daily papers in the "Golden State" and the territories, among which were the Express, the Democrat, and the Appeal, all of Marysville, Cal., and the Tombstone (Arizona) Times, all of which, with the exception of the latter, are published to this day.—Union

FOREIGN.

THERE are one hundred and sixty-nine newspapers in Cuba.

THE printing trade in Glasgow is in a very depressed condition.

 $\ensuremath{\text{OVER}}$ one hundred and thirty local journals are printed and published in the London suburbs.

It is stated that the queen's printers, in London, have 60,000 type forms standing in their cellars.

aı

ex

co

OUT of the twenty-nine million population of Italy it is stated that only one million subscribe to newspapers.

THE Shields *Daily News* is now occasionally embellished with illustrations obtained by the luxotype process.

THE Clarendon Press, at Oxford, has appliances for printing works in a hundred and fifty different languages and dialects.

AFTER a long and careful trial of composing and distributing machines, the proprietors of the Dundee (Scotland) *Advertiser* have abandoned their use.

A VERY curious fifteenth century manuscript volume was recently sold in London for £980. It consisted of two hundred and fifty-seven folio leaves of vellum, and contains minatures of extraordinary beauty,

illustrating the early history of Normandy and early English history, all executed in the highest style of Burgundian art, and with the minutest detail of architecture, costume and armor.

MR. C. S. MILLINGTON, of the old established and well known firm of Millington & Sons, wholesale stationers, 31 and 32 Budge Row, London, died on November 21, the immediate cause of death being a paralytic stroke.

The Manchester Coöperative Printing Company, after paying its operatives one shilling per week above the recognized standard of wages and giving them a yearly bonus, gives its shareholders a dividend of 7½ per cent.

The extensive premises of Messrs. Guy Bros., printers and stationers, 26 and 27 Academy street, Cork, was destroyed by fire on the 7th of December. The loss amounts to \$85,000, and at least one hundred employes are thrown out of work by the disaster.

HER majesty the queen has presented to the library of the London Society of Compositors copies of her works, "Leaves from the Journal of our Life in the Highlands," and "More Leaves from the Journal of a Life in the Highlands." Each copy bears her majesty's autograph.

MR. JOHN WALKER, one of the oldest Lancashire printers, who has recently died at Preston at the age of eighty-five, has left £200 to the Royal Albert Asylum for Idiots and Imbeciles, Lancaster; £2,000 to the Preston Infirmary; £500 to one local Independent chapel, and £200 to another church.

KRUPP's cannon and iron foundry at Essen has a printing-office with a plant of three steam and six hand presses. In addition to the letterpress branch, there are a lithographic establishment and a photographic atelier. The printing done is, of course, confined to the requirements of the foundry.

THE British Colonial Printer and Stationer says: It may interest many young men who complain that they can get no work to do, and who hope to find lucrative employment in continental towns, to hear that for a vacant situation in one of the Parisian banks—a place worth $\angle 48$ a year—there were no less than 6,000 applications.

A PRINTING-PRESS has been patented by Mr. Thomas Forknall, of Manchester, England. The invention consists in a ring or circular plate held in place on the yoke by screws and having its outer circular edge screw threaded, on which plate a ring nut is screwed, to facilitate the adjusting of the platen according to the thickness of the paper, as by turning the ring nut the platen will be pressed a greater or less distance from the yoke.

THE Paris firm of Messrs. Alauzet & Co. have just finished a new machine to print phototype—photo-chromos. The system is very practicable, and the machine can be easily converted from a litho to a typo machine, and is so constructed as to print various colors at one working. It is specially adapted for fine bookwork. The same firm is constructing four large litho machines—two for Messrs. Waterlow & Sons, and two for Messrs. Goodall.

THE whole number of publications of the world during the year 1883 was, according to official accounts sent out from Leipsic, 15,474 books, pamphlets, etc., and 386 maps, or 429 books, etc., and 40 maps more than during the year 1882. Leipsic continues to be the center of the book trade for Germany. In that city, during 1883, 2,624 books and 14 maps were published, while in Berlin 2,484 books and 57 maps were issued. Austria issued 1,944 publications and Switzerland 644.

JOURNALISTS have been excused from serving on juries in India, the judge in so deciding following the precedent laid down by another judge in Natal. He went so far as to say that all reporters should be excused from serving on a jury, because through their presence at preliminary examinations and inquiries for the purpose of publishing the same as news, they might be in possession of facts which might come out in evidence, and probably they would have prejudiced the

In the library of Trinity College, Cambridge, a hitherto unknown specimen of Caxton's typography has come to light. It is a "Letter of Indulgence" issued in 1480 by John Kendale (the Turcopolier of Rhodes) to encourage the collection of money to carry on the war

against the Turks, and printed by Caxton in type similar to that used in the "Cronycle of England." The only other known edition of the "Indulgence" is printed in the larger type used for the illustrated edition of the "Boke of ye Cheses."

THE following are the newspapers published on the Island of Jamaica: The Colonial Standard, The Gleaner, The Express, Daily and Tri-Weekly News-Letter, The Budget, The Creole, The People's Banner, The Jamaica Tribune, The Jamaica Gazette (the government organ), The Trelaway Advertiser, The Falmouth Gazette, The St. James Gazette, The Jamaica Colonist, The Westmoreland Telegraph, The Baptist Reporter, The Church of England Miscellany, The Wesleyan Messenger, besides other minor papers in other parts of the island.

OLD GERMAN BLACK LETTER.—A Berlin firm has recently got out specimens of old German black-letter types and borders suitable for old-style printing. Several sizes of initials are also shown in groups, and forming beginnings to the displayed portions of the sheet, which are arranged in tablets and panels. The designs are worked in black and red on toned paper, in a neat Arabesque border in black, between plain rules in black and red, with corners to match both inside and out. The arrangement of the heading in a long tablet with rubricated initials at almost equal distances apart is very effective.

A short time since we gave a paragraph about a large boxwood block for engravers which was said to be the largest boxwood block ever made. Mr. T. J. Lawrence, Amalgamated Boxwood Block Manufacturer, of 17 West Harding street, Fetter-lane, writes to inform us that the largest block of the above description ever made was manufactured by him, the size being 52 by 30 inches; 180 pieces of wood and 520 bolts were used in its formation. The block was exhibited by him at the last Paris Exhibition, and was afterwards sold to Messrs. Gordon & Gotch, of Sydney.—Landon Press News.

At the one hundred and forty-third delegate meeting of the London Society of Compositors the report showed that the financial position was more favorable than for many years past, the increase on the quarter being £1,417 14s., as compared with the corresponding quarter of last year. The superannuation allowance, however, is steadily increasing. The important and vexed question of the right of members in chapel to pay their subscriptions at the society house was under consideration. It was contended that it was contrary to all law and equity to deny members the right of paying at the chief office, and a direct negative to the committee's interpretation of the rule was moved and carried by a very large majority. A committee of seven was also appointed to consider the best means of electing the executive, and to report to the next meeting.

LITHOGRAPHIC WAGES.—The following shows the minimum rates of wages and number of working hours in the towns in which the Amalgamated Society of Lithographic Printers of Great Britain and Ireland has branches: Aberdeen, 51, 27s.; Belfast, 54, 30s. to 35s.; Birmingham, 54, 30s.; Bolton, not given; Bradford, 54, 33s.; Carlisle, 54, not given; Cork, 54, 35s.; Derby, 54, 33s.; Dublin, 55 and 57, 33s.; Edinburgh, 51 and 54, not given; Glasgow, 51 and 54, not given; Gloucester, 54, 30s.; Hanley, 56, 28s.; Huddersfield, 54, 32s.; Kirkcaldy, 51, 32s.; Leeds, 54, 32s.; Leicester, 55, 30s.; Liverpool, 51 and 54, 31s. and 33s.; London, 54, average rate 42s.; Manchester, 55, 33s.; Middlesboro' and Stockton, 54, 30s.; Nottingham, 54, 35s.; Paisley, 57, not given; Rochdale, 54, 33s.; Sheffield, 54, 30s.; Wolverhampton, 54, 30s. to 35s.; Worcester, 56, 30s.; Newcastle-on-Tyne, 54, 28s.

Mr. Bradlaugh, M.P., has just started a printing-office of his own, and has written to our secretary (Mr. Drummond) expressing his desire that society principles should be strictly observed in his office. Hitherto Mr. Bradlaugh has always stipulated with his printers that all work done for him should be paid according to the scale fixed by the joint-committee of masters and journeymen. Where there is one "Christian" or teetotal publication paid at the fair rate of wages, there are twenty that are produced unfairly—not even a decent "rat" could earn a living on some of them. And yet they are owned and edited by men whose names are as familiar as household words, who pose as philan-

thropists and apostles, and who never tire of prating how they have raised themselves from the level of the miserable sinners they are addressing to the exalted positions they now occupy.—London Cor. Scottish Typo. Circular.

THE Bautzen (Saxony) Nachrichten says: "According to the directory just published in Germany there are in this country 62 paper and paper board factories with 826 paper machines. Besides this there are in Germany 100 small mills making hand-made paper. In Switzerland there are 33 paper mills with 43 machines. In Luxembourg, 2 mills with 2 machines. In Austria and Hungary, 193 mills and 273 machines. The raw material for paper making is pulp in Germany; in 437 mills mechanical wood pulp is used, in 42 mills steam pulp and in 39 mills chemical pulp is used. In Switzerland there are 9 mechanical, one straw and six chemical wood pulp mills. In Luxembourg the two mills are mechanical wood pulp users. In Austria and Hungary 150 mills are mechanical wood pulp, 10 straw pulp and 19 chemical wood pulp mills. The increase in 1883 was 31 paper mills with 32 machines, 40 mechanical wood pulp mills and 18 chemical pulp mills. There are quite a number being built and several planned."

ELECTRIC LIGHTING IN THE "IRISH TIMES" OFFICE.—As illustrating the advantages resulting from the use of the electric light in newspaper offices, Mr. Fahie instances the office of the Irish Times, where this method of illumination has been in use nine months. The composing room of the office measures some 60 feet by 40 feet, and is 70 feet in height. Before the introduction of the electric light this apartment was lighted by one hundred gas-jets, and, remembering that one gas-jet consumes as much oxygen as five individuals, and adding to this the effects resulting from the breathing of the compositors together with the long hours of night during which work is carried on, we can readily conceive how extremely unwholesome and unhealthy must have been the air of this apartment. Indeed, as a matter of fact, the employes frequently suffered from ill health and discomfort, which they usually attributed to the vitiated state of the atmosphere, and it was not unusual for several men to be absent on sick leave at one time. This was especially noticeable during the summer months. The temperature of the room frequently was as high as 85 degrees in winter, and 95 degrees in summer. The discomfort sometimes occasioned in summer was very serious indeed, oftentimes rendering it impossible for some of the men to carry on their business for the usual number of working hours. Since the introduction of the electric light the condition of things has been entirely changed. The atmosphere is pure and healthy, the thermometer rarely registers more than 70 degrees during the night, the light is bright and perfectly steady in its action, the health of the employés is good, and their spirits cheerful and buoyant, many of them being able to work for considerably longer hours now than formerly, and the sick list has almost disappeared. The experience of many other newspaper offices where the experiment has been tried is, we believe, pretty much to the same effect.

SPECIMENS RECEIVED.

A New Year's Card, in colors, from the Burnell Printing Co., Marshalltown, Ia., is attractive in design, and reflects credit on its author, B. H. Howig.

FROM the Aztec Printing Company, of Santa Fe, New Mexico, comes a business card which proves that all the No. 1 job printers do not reside in the East.

WE are in receipt of an 1885 calendar, issued by The Photo-Engraving Co., New York, which is splendidly engraved and worked. Lovers of the beautiful should apply for one.

From the job department of the Guelph (Ont.) Herald, we have received a certificate of honor and merit of the Wellington Model School, printed in colors and gold. The headlines are too crowded, and the tint a little too positive, but taken altogether is a very creditable piece of work.

We have received from *The Vox Populi* book and job office of 130 Central street, Boston, a neatly executed and attractive callendar for 1885; as also one from the well known firm of Matthews, Northup & Co., of Buffalo, N. Y., which maintains the high reputation, so justly enjoyed by this house.

Mr. Geo. A. Seaman, of Poughkeepsie, sends us a business card printed in colors and gold which deserves more than a passing notice. The design is original, the rule work nicely executed, the colors are subdued and in thorough harmony with each other, and altogether the effect is pleasing in the extreme.

The calendar of Merchant & Co., metal workers, New York, from the press of Matthews, Northrup & Co., of Buffalo, is the handsomest and best executed 1885 specimen that has reached our table. The design is elegant, and appropriate to the business it is intended to represent; the colors are harmoniously blended, and its entire execution shows it to be the production of a master hand.

WE acknowledge the receipt of a very pretty advertising card from the Bullard Print House, Wheeling, W. Va. The specimen is certainly original and unique, and reflects credit on its designer. On one side is a neatly printed calendar, and on the other a business card printed in maroon, and at its side, fastened by means of a wafer, is a spray of fern representing a miniature Christmas tree.

From the well known firm of Wells & Rafter, Springfield, Mass. (whose manly circular to the public announced that they refused to compete with Cheap John establishments), we have received a large number of specimens of the finer class of printing, consisting of embossed invitations, receptions and programmes, business and professional cards, labels, etc. It is a positive pleasure to examine such work, as all the samples, without exception, are beautiful, chaste, cleanly printed specimens of typography, executed in the highest style of the art.

AWARD.

THE undersigned, appointed a committee by Mr. A. C. Cameron to decide on the merits of the designs accepted for a cover for THE INLAND PRINTER, in accordance with the terms published, after due consideration unanimously award the first premium to the design furnished by Manz & Co., the second to Hilpert & Chandler and the third to Baker & Co.

M. J. CARROLL, of Rand McNally & Co. THOS. FAULKNER, of the J. M. W. Jones P. & S. Co. H. E. SHATTOCK, of Geo. E. Marshall & Co. R. McLaughlin, of Shepard & Johnston.

ITEMS OF INTEREST.

CHINA proposes to adopt postal cards on and after January 1, 1885.

PAPER is now used in Germany instead of wood in the manufacture of lead pencils.

PUSCHER, the Nuremberg chemist, says a paste composed of starch, glycerine and gypsum will maintain its plasticity longer than any other cement.

HAND-MADE envelopes originally cost five cents each. The envelope-making machine now turns them out so that a thousand are sold for thirty cents.

NEW SOUTH WALES possesses several kinds of wood suitable for the use of engravers. Among these is the yellow box, which has a fine close grain, and the same remarks holds good of the corkwood, a beautifully fine white timber.

THE increase of illustrations is said to be causing a rise in the price of boxwood. The box tree, from sections of whose trunk the blocks for engravers are made, is found in marketable quantities on the shores of the Mediterranean.

At the exhibition of the Massachusetts Charitable Mechanics' Association, which opened on the 3rd inst., a firm of Boston printers printed, folded, stitched and bound a work on Electricity, doing all the work by machinery run by an electric motor.

The following is a recipe for making the material used to block or stick the heads of stationery together: A quarter of an ounce crude gutta percha; dissolve in bisulphate of carbon to the consistence of mucilage. Apply to the edges of the paper where required.

FOR ENAMELING CARD-BOARD AND PASTEBOARD.—Dissolve ten parts of shellac in a sufficient quantity of alcohol and add ten parts of linseed oil. To each quart of the mixture add also about one-fourth of

an ounce of chloride of zinc. The board may be immersed in it or the solution applied with a brush. The board is thoroughly dried and the surface is polished with sand paper or pumice before applying this preparation.

A NEW lithographic trade journal, Lithographische Rundschau, will be issued in Hamburg on January 15, 1885, and published four times monthly, as a journal for lithography, zincography and kindred branches. The publisher is Ferdinand Schlotke, who also issues the Journal fuer Buchdruckerkunst.

THE jointless type cases, manufactured by the Edson Type Case Co., Cleveland, in addition to their other advantages, are made from water-proof material. It is known that a wood case is practically ruined by even a moderate application of water, and in case of fire their special advantages can he appreciated at a glance.

In order to keep machinery from rusting take one ounce of camphor, dissolving it in one pound of melted lard; take off the scum and mix in as much fine black lead as will give it iron color. Clean the machinery and smear it with this mixture. After twenty-four hours rub clean with soft linen cloth. It will keep for months under ordinary circumstances.

A. KILNER gives the following recipe for making white ink suitable for pen-drawing: Mix pure, freshly precipitated barium sulphate, or flake white with water containing enough gum arabic to prevent the immediate settling of the substance. Starch or magnesium carbonate may be used in a similar way. This must be reduced to impalpable powders.

Tracing Paper is very expensive in the market, and everyone who would like to make his own may do it in the following manner: Mix well together seventy-five parts of olive oil and twenty-five parts of benzine. With a brush put it on best tissue paper and hang it up for about thirty-six hours. This is a very transparent tracing paper; until the benzine has evaporated it is also extremely inflammable.

F. TAURER, of Lunzenau, Saxony, has a patent for making papers and boards which is different from other systems in having the paper, etc., produced from several layers of pulp, which are formed singly in special cylinders and brought by feeding cloths to a place where they are united by pressure. By this means the single layers may be differently colored, etc. The system is also claimed to be cheaper.

An invisible ink for use on postal cards is made by mixing one part, by measure, of sulphuric acid with seven parts of water. A gold or quill pen must be used, and when quite dry the card will show no sign of writing. To make the writing appear the card must be held to the fire. If it be desirable to make some writing (?) appear on the card a few words can be written across the invisible ink with tincture of iodine, which will disappear on being held to the fire.

PAPER is made in France from the hop vine, and it is claimed that the fiber secured is the best substitute for rags yet obtained, as it possesses great length, strength, flexibility and delicacy. It may be to the advantage of paper-makers near our hop growing districts to investigate this matter, for the vines are now a waste product, and if they are properly adapted for fine paper, as it is claimed, a valuable stock has been running to waste. Bean and pea vines belong in the same category.

CELLULOID TYPE.—We have received a specimen of celluloid poster type manufactured by the Celluloid Stereotype Company, 82 and 84 Fulton street, New York. Among the special advantages possessed by this invention is that its surface is much smoother than wooden type, because the grain is perfectly covered by the celluloid; that as it is impervious to water, benzine, etc., it is not near as apt to open or split as wooden-faced type, and also that its cost is less because by this process wood can be utilized that is not available under the old system.

To prevent alterations in writing, the following process of preparing paper has been recommended. Add to the sizing five per cent of cyanide of potassium and sulphide of antimony, and run the sized paper through a thin solution of sulphate of manganese or copper. Any writing on this paper with ink made from nutgalls and sulphate of iron can neither be removed with acids nor erased mechanically. Any

acids will change immediately the writing from black to blue or red. Any alkali will change the paper to brown. Any erasure will remove the layer of color, and the white ground of the paper will be exposed, since the color of the size is only fixed to the outside of the paper without penetrating it.

QUALITIES OF GOOD PAPER.—Good paper ought to feel tight and healthy, not clammy and soft, as if a little muscle were required. Paper-makers say that a good paper has "plenty of guts" in it, a forcible, if not extremely polite, expression. In buying good paper, therefore, always look out for the guts! Clay gives paper a soft feel. Perhaps the first qualification about a good writing paper is its cleanliness and freedom from specks of all kinds. A dirty paper is never salable except to dirty people and to firms who do not mind using dirty material.

C. W. Brown, of Typographical Union, No. 13, Boston, Mass., has patented a galley rest for type cases. The cap case rest is a very simple and convenient arrangement for placing galleys, sticks or leads above the cap and small cap boxes, and also for placing one galley above another, and allowing the under galley to be removed without danger of the upper one sliding down. The lower case rest is intended for newspaper offices, where narrow galleys are used, allowing a galley to be placed parallel on the case, raising the same sufficient to allow free access to all of the boxes without sliding the galley.

A New Method of Obtaining Pulp.—G. Archbold macerates wood or straw, cut into suitable pieces, in dilute milk of lime, after twelve hours introduces them into a suitable digester, and saturates with sulphurous acid, the pressure amounting to four or five atmospheres. In two hours the material is so loosened up that, after washing with water and further treatment under pressure, with three per cent chloride of calcium and half per cent aluminum sulphate dissolved in a little water, the stuff obtained without any further operation has the appearance of cotton, and can serve for the manufacture of fine qualities of paper.

THE TYPOTHETCE, of New York, is a society of master printers reorganized a year ago with marked success, and which already includes fifty of the leading printers and publishers of that city. In a circular issued to the trade, it is stated that "the society does not assume in any way to interfere with, or regulate prices. It does propose to exercise a healthy influence on the trade, and to gather and furnish information that will be valuable to every member." With this object in view it proposes to establish a library of reference, art and trade journals, samples and specimens. Its plans also include an employers bureau and an employers exchange, as well as a collecting and inquiring agent. Its headquarters are Rooms 13, 14 and 15, 19 Park Place, and 18 Murray street.

A PERPETUALLY damp copying paper, always ready for use, is prepared by dissolving one pound of chloride of magnesium in a moderate quantity of warm water—about one pound. When dissolved apply this solution with a brush to ordinary copying paper, or preferably by means of cloth pads saturated with the liquid, then place these pads between any suitable number of leaves; apply pressure, at first very moderate, until the absorption by the paper is complete; then remove the cloth pads, and apply further pressure; it is then ready for use. Paper prepared by this process will remain permanently moist under ordinary temperature, and, if made dry by extraordinary heat, will regain its moisture upon being subject to the common atmosphere. One advantage of this method is, that the sheets of paper will not adhere to each other.

EARLY PUNCTUATION.—Caxton, the first English printer, had three punctuation points—the comma, the colon, and the period; but it is doubtful if he had any idea of the principles of punctuation. The confusion resulting led to the separating of words by a single dot. Then a space between the words superseded the dot, which was made to perform another service, viz., to show the division of a sentence. Some of Caxton's books are entirely without points. In others, one of the three points is used to the exclusion of the others. Of the comma he used two sorts, a short and a long, but with no variation in meaning. The semicolon had no existence for him, though something like it appears once, and once only, in his great heading type. He used

the hyphen constantly; and where the line was very close spaced, made the colon, which was much thinner, do duty for it. The paragraph mark, ¶, as showing the commencement of a new sentence, took the place of a period, the colored initial serving the same purpose. It was not until the sixteenth century that printers began definitely adopting an acknowledged system of graduated points.

A DESERVED TRIBUTE.—The following communication explains itself:

MR. E. L. MEGILL:

NEW YORK, December 5, 1884.

Dear Str.,—On the 13th ultimo I bought a set of your "Radiating Sheet Supporters." To say that I am pleased with them is but faintly to express it. They are perfection. On all kinds of close register work, like printing in several colors, they do not shift any, and allow of new platen sheets being put on the press without disturbing the register. All progressive printers cannot do without them when once used.

Yours, etc.,

N. F. CARRYL, 64 College Place, City,

The foregoing is simply one of a hundred similar recommendations from practical printers who have tested the Megill "Radiating Sheet Supporters," and whose testimony corroborates the statement made therein, that they are perfection.

To prepare artificially the pumice used in lithographic establishments in grinding the stone, has been tried repeatedly. The natural pumice is frequently difficult to manage, not being of the requisite size, shape or purity, so that the grinding is hampered by many inconveniences. Therefore the craft will be pleased to hear that Mr. Em. Thieben, in Pilsen, Bohemia, has succeeded in making pumice that answers all demands. The artificial pumice, as a matter of course, is free of all impurities and obtainable in various degrees of hardness, grain and of different shapes. Thieben's artificial pumice has already been tried with perfect success in many lithographic concerns, and undoubtedly will soon come into general use.—Lithographer and Printer

PRINTERS who patronize the electrotype foundries should fully understand certain necessities of the molder, and observe them in every form they send to the foundry. Of course the main feature is to have the form justified so that it will lift out of the wax, face downward, after it has been forced in to the shoulder. Where cuts are used in the form any open space around them should be filled up with high slugs or furniture, or any material that is high, even if it is type-high. Where there are joints of rule they should be firmly secured up to the shoulder, for often when the form leaves the printer with perfect joints they are so loosely justified that the immense pressure in the wax drives them apart. Thus miters are opened, single rule is thrown out of straight line or made heavy in the face, unless these weaknesses are remedied at the foundry. There will be much better satisfaction all around if printers will observe these few requirements, and remedy the defects themselves.—The Electrotyper.

To preserve a boiler, the following precautions cannot be too strongly enforced upon the attendant:- Raise steam slowly. Never light fires till the water shows in the gauge-glass. Never empty under pressure, but allow the boiler and brickwork to cool before running the water off. Clean the boiler inside regularly once a month, oftener if the water is bad. Clean all flues once a month, stop any leakages, and get rid of any damp in the seatings or covering. Examine especially plates subject to the direct action of fire, the underside of the boiler, and any parts in contact with the brickwork, or with copper or brass, where water is present. If not required for some time, and it is impracticable to empty and thoroughly dry it, fill the boiler quite full with water and put in a quantity of common washing soda. Should the water get too low, draw fire at once, as a rule; but if the fire is very heavy, or if the furnace-crown appears to be red hot, it is best to smother the fire with wet ashes, wet slack, or any earth that may be at hand. The dampers may then be closed. If the engine is running, or the feed-pumps delivering into the boiler, do not stop them, but if not working do not start them, and do not attempt to blow off the steam until the fire is out and the over-heated plates have cooled. To save coal, keep the boiler clean inside and outside. If there is a plentiful supply of steam keep a thick fire, but if short of steam work with a thin fire, keeping the bars evenly covered. Firing a furnace on each side alternately tends to prevent smoke.

THE PRESS OF FINLAND.

In one of the reports recently published by the governor-general of Finland, an account was given of the press of the Grand Duchy. This consists of fifty-four periodicals; twenty-four edited in the Swedish language, and thirty in Finnish. The first newspaper published in the country appeared in 1771, and belonged to the former category. The second came out five years later and was printed in the vernacular tongue. After this the press grew rapidly, although up to 1840 the Swedish journals outstripped in number the Finnish. The researches, however, of Elias Lonnret into the national literature and the publication of the Finnish epic, "Kalewala," gave a remarkable impulse to the vernacular and Swedish-until then the language of the educated classes-began to be pushed into the background. At present the Swedish language still prevails in polite society, though to a less degree, and it is therefore in the towns that the Helsingfors Dagblad, the Abo Posten, the Ostra Finnland, and other Scandinavian papers appear. The Uusi Suometar, the Sanansaatlaja, and other Finnish journals with equally unpronounceable titles, appeal more to the peasants and lower classes, and they circulate chiefly in the rural districts. A feature in the vernacular press is the cheapness of the newspapers, The Uusi Suometar, which appears five times a week, only costs 13 marks, or 10s. a year, which is less than a halfpenny a number. Its circulation is 6,800 a day-insignificant, indeed, for a "daily" boasting of the "largest circulation" in Finland, but then the whole population of the province is barely 2,000,000 people, and these are scattered over a superficial area twice as large as that of this country. At Helsingfors several illustrated papers appear weekly; at Jyväskyia there are three reviews and a schoolmaster's journal, and in the southern districts every village has a reading club that subscribes freely to the press. In 1883, when the use of Swedish as the official language was abolished and the vernacular compulsorily employed throughout the Duchy, the support accorded by the government to the Swedish newspapers was withdrawn, and its transfer to the national press gave a fresh impulse to the literature ennobled by the poetry of the late John Runnenberg, the Tennyson of Finland .- The British and Colonial Printer and Stationer.

STEREO-PLATES.

The use of stereo-plates in the publication of country papers has become so general, and the advantages resulting therefrom are so apparent, that it is no longer a question of expediency whether to use them or not, but rather as to what form of those kinds in general use is the most convenient and desirable. Among all the different kinds brought to our notice, we know of none that combines so many advantages as the full-length column form furnished by the A. N. Kellogg Newspaper Co., of this city. They are sending out these plates in single columns, of suitable lengths for the first and the full pages of all the regular sized papers, from a four column folio to an eight or nine column quarto. In the use of this form, no cutting or fitting of plates is necessary; no adjusting of plates or bases to each other, or to the length of the columns is required, as they are always at hand, of the right length, ready to be locked up in the form, with the columns of type, at a moment's notice.

HOW TO LOOK AT A SHEET OF PAPER

We dare say a good many persons on reading this heading will be disposed to question whether there can be more than one way of looking at a sheet of paper. There are, however, a good many ways of doing it. The phrase "looking at" a sheet of paper means a good deal more than meets the eye, and is, in fact, a sort of gentle sarcasm on the various processes which a piece of paper, put into expert fingers, is made to undergo. Pulling, tearing, wetting, creasing, are all of them little manipulations comprised within the significance of the synonym "looking at," and we give below a short description of methods generally practiced to determine the quality of different classes of paper, by both papermakers and their customers.

Browns.—Put the sheet on some flat surface, and keep it in its place with the left hand; then take it near the end with your right, and, pressing the forefinger forcibly against the sheet, draw your hand slowly along. This is a good test for strength.

News paper.—It is of no use to examine such paper by looking through it. Tear it in order to ascertain length of fiber, and pull it with a view to judge of its strength. With a glass rod apply a drop of nitric and sulphuric acid (two parts of one to one part of the other); if the spot turns brown, mechanically prepared wood is present in the paper, and, if the paper is required to last more than six months, this is a fatal objection.

PRINTINGS.—Apply the tongue for sizing, and compare opposite sides together for equality of surface. Look through a sheet against strong light for spots, and note whether the paper be "regular." Printing paper ought to "rattle" well, and have good strength and surface. When there is a great "rattle," and if the paper has a glistening brilliancy of texture, then most likely straw is present in the fiber, which, when introduced in excessive quantities, causes the paper to break when folded. The paper should, therefore, be creased and then examined.

BLOTTING PAPERS.—Drop blots of ink on the paper, and note the rapidity or slowness of absorbence. There are more scientific tests than these, to which we may refer at another time. Handle the paper to ascertain its softness.

LEDGER PAPERS (hand-made and otherwise).—It is often very difficult for the inexperienced to distinguish hand and machine made papers, as many of the latter are specially manufactured to imitate their more costly rivals; and in some cases-as, for instance, Mr. Busbridge's papers-the machine-made classes are actually superior to some others made by hand. Those brought up in the trade can, however, readily distinguish even the best imitation, and in most cases can determine in what mill it was made. If the sheet is held up in a good strong light it will, as a general rule, be found that the machine-made sheet is more strongly marked and looks harsher in the wire-mark and water-marking. A good hand-made sheet has a pearly, clear, transparent appearance, which is caused by the longer retention of water in its substance when manufactured. Compare the sides also, as in printings, and if the wire-mark is very perceptible, the sheet is most likely made by machine. Lap an edge over, and fold tightly; then attempt to tear down the fold. If it does, the paper is of inferior or medium quality.

LOAN AND BANK-NOTE PAPERS.—The foregoing remarks also apply to these descriptions. Testing machines are often used for the last-named as well as for other papers, and may be obtained of Mr. C. H. Roeckner, of the Royal Arcade, Newcastle-on-Tyne, or of Messis. T. J. Marshall & Co., Campbell Works, Stoke Newington. They act, of course, on the principle of a gradual strain, the breakage point being indicated in pounds upon a dial plate.—London Printing Times and Lithographer.

BUSINESS OUTLOOK.

CORRECTED FROM MONTH TO MONTH.

Akron.—State of trade, good; prospects, good; composition on morning papers, 30 cents; evening, 25 cents; bookwork, 30 cents; job printers, per week, \$12 to \$15. No difficulty, but printers had better wait till spring before they come here.

Boston.—State of trade, bad; prospects, bad; composition on morning papers, 40 and 45 cents; evening, 30 and 35 cents; bookwork, 38 cents; job printers, per week, \$15. There is still trouble with the Post. Stay away.

Brooklyn.—State of trade, dull; prospects, not very bright; composition on evening papers, 38 cents; bookwork, 38 cents; job printers, per week, \$17. No difficulty, but we advise compositors to stay away from Brooklyn.

Chicago.—State of trade, very dull; prospects, indefinite; composition on morning papers, 40 cents; evening, 37 cents; bookwork, 37 cents; job printers, per week, \$18. More printers than there is work for.

Cincinnati.—State of trade, dull; prospects, poor; composition on morning papers, 40 cents; evening, 37 cents; bookwork, 40 cents; job printers, per week, \$18. The "subs" are "kicking," and there are more men here already than can do well or even fairly.

Cheyenne.—State of trade, not good; prospects, encouraging; composition on morning papers, 40 cents; evening, 37½ cents; bookwork, 40 cents; job printers, per week, \$20. There is no difficulty existing, but this is a place where resident printers can nearly fill the bill.

Cleveland.—State of trade, very dull; prospects, fair for improvement; composition on morning papers, 35 cents; evening, 33½ cents; bookwork, 35 cents; job printers, per week, \$12 to \$15. Cleveland is a poor place to look for work, as there is not enough to employ those already here, and the daily papers are overrun with subs.

Columbus.—State of trade, dull; prospects, fair; composition on morning papers, 35 cents; evening, 33½ cents; bookwork, 33½ cents; job printers, per week, \$14. No difficulty, but we advise tramps to stay away at present.

Detroit.—State of trade, dull; prospects, more encouraging for January; composition on evening papers, 32 cents; bookwork, 33½ cents; job printers, per week, \$14. The city is overcrowded as it is, and printers better give Detroit a wide berth.

Des Moines.—State of trade, pretty good; prospects, good indications; composition on morning papers, 33 cents; evening, 25 cents; bookwork, 30 cents; job printers, per week, \$12 to \$15. The labor market is glutted, and the Leader and Capitol, also the News, the former morning and the other evening sheets, are barred.

Dubuque.—State of trade, good; prospects, very good; composition on morning papers, 33½ cents; evening, 30 cents; bookwork, 30 cents; job printers, \$t4. No room for tramps, as the town is well supplied at present.

Elmira.—State of trade, fair, with plenty of men to supply demand; prospects, not very favorable; composition on morning papers, 30 cents; evening, 30 cents; bookwork, 30 cents; job printers, per week, \$12. There is no existing difficulty.

Evansville.—State of trade, very dull; prospects, not encouraging; composition on morning papers, 35 cents; evening, 30 cents; bookwork, 35 cents; job printers, per week, \$14. Stay away from Evansville, for though there is no difficulty at present, there are strong indications there will be shortly.

Galveston.—State of trade, very bad; prospects, worse, with a probable reduction; composition on morning papers, 45 cents; evening, 40 cents; bookwork, 40 cents; job printers, per week, \$20. There is a difficulty here, a demand for a reduction, which comes up for action on Sunday, December 11.

Grand Rapids.—State of trade, terribly bad; prospects, no better; composition on morning papers, 30 cents; evening, 28 cents; job printers, per week, \$13. There are thirty-seven "subs" in this town at present writing, all of them broke. There are four union papers here, and one "rat" sheet, an evening paper. No union man is allowed to work in it, however.

Houston.—State of trade, very bad; prospects, horrible; composition on morning papers, 45 cents; evening, 40 cents; job printers, per week, \$20. Our advice to printers is, go to Europe first, via Australia and China.

Indianapolis.—State of trade, very dull; prospects, not very bright; composition on morning papers, 35 cents; evening, 33 cents; bookwork, 35 cents; job printers, per week, \$15. Printers keep away from this city. The Journal is being boycotted because the proprietors, Messrs. John C. New & Son, have not kept their promise made to the union.

Joliet.—State of trade, moderate; prospects, fair; composition on morning papers, 30 cents; evening, 27 cents; bookwork, 27 cents; job printers, per week, \$12. There is no difficulty, but there is certainly not much show here for work at present.

Kansas City.—State of trade, dull; prospects, not very bright; composition on morning papers, 37½ cents; evening, 30 cents; bookwork, 37½ cents; job printers, per week, \$15. We advise travelers to make some other place their object-ve point during the winter, as there is only one reliable office in which union men can work, and that is not a strictly union office.

Lincoln.—State of trade, fair; prospects, good; composition on morning papers, 32 cents; evening, 25 cents; bookwork, 30 cents; job printers, per week, \$15. Our advice is, stay away from this place, as there is no need for more help.

Louisville.—State of trade, dull; prospects, not encouraging; composition on morning papers, 40 cents; evening, 37 cents; bookwork, 40 cents; job printers, per week, \$18. To printers seeking employment we say, stay away.

Milwaukee.—State of trade, fair; prospects, fair; composition on morning papers, 38 cents; evening, 33 cents; bookwork, 35 cents; job printers, per week, \$14 to \$18. While the trade has been dull, it is certainly picking up.

Mobile.—State of trade, pretty good; prospects, equally good; composition on morning papers, 40 cents; evening, 40 cents; bookwork, 40 cents; job printers, per week, \$20. There is some kicking about chapel rules, which will no doubt be shortly settled. Keep away from Mobile by all means.

Nashville.—State of trade, dull; prospects, discouraging; composition on morning papers, 40 cents; evening, 35 cents; bookwork, 40 cents; job printers, per week, \$16. Yes, we have a difficulty. The American is the only strictly union office in the city. The World pays the scale, but bars union men. The Banner (evening) does not pay the scale.

New Orleans.—State of trade, exceedingly bad; prospects, very poor; composition on morning papers, 50 cents; evening, 45 cents; bookwork, 45 cents; job printers, per week, \$20. Printers had better stay away from this city; if they do not they will suffer. Men have been locked out of one newspaper and two job offices on account of the new scale of prices.

Omaha.—State of trade, very dull; prospects, gloomy; composition on morning papers, 32 and 34 cents; evening, 30 and 31 cents; bookwork, 30 cents; job printers, per week, \$15. No difficulty, but "comps" should steer clear of Omaha.

Oshkosh.—State of trade, booming; prospects, favorable; composition on morning papers, 28 cents; evening, 23 cents; bookwork, 25 cents; job printers, per week, \$12. The Times of this city has just commenced issuing an evening as well as a morning edition. While business is good, there are plenty printers already here to do it.

Pittsburgh.—State of trade, very dull; prospects, not bright; composition on morning papers, 40 cents; evening, 35 cents; bookwork, 35 cents; job printers, per week, \$15. Keep away from Pittsburgh.

Providence.—State of trade, dull; prospects, fair; composition on morning papers, 38 and 40 cents; evening, 33 cents; bookwork, 30 and 35 cents; job printers, per week, \$13 to \$16.

Raleigh.-State of trade, very fair; prospects, good; composition on morning papers, 33½ cents; evening, 33½ cents; bookwork, 33½ cents; job printers, per week, \$14 to \$16. There is no difficulty, and though business is brisk, there is a full supply of printers here.

Rochester .- State of trade, dull; prospects, not very promising; composition morning papers, 33 cents; evening, 30 cents; ad. and com. cases (per week), \$17.25 to \$20; bookwork, 30 and 33 cents; job printers, per week, \$14 and upward. Our advice is, by all means stay away for the present. The job office of James F. O'Neill has been declared unfair, as employés are unable to collect their wages. A new weekly paper, the Flower City Roller, devoted to roller skating and amusements in general, made its first appearance Christmas day in this city.

Sacramento.-State of trade, fair; prospects, nothing extra; composition on morning papers, 50 cents; evening, 45 cents; bookwork, 45 cents; job printers, per week, \$21. The town is full of printers, so stay away, you who think of coming.

Sedalia.-State of trade, fair; prospects, good; composition on morning papers, 271/2 cents; evening, 25 cents; bookwork, 30 cents; job printers, per week, \$12 and \$15. There is enough of work for the men now in the city, and for no more.

Seattle .- State of trade, dull; prospects, good; composition on morning papers, o cents; evening, 45 cents; bookwork, 50 cents; job printers, per week, \$21. Town strictly union. Keep away, as we have a sub for each regular in town.

St. John, N. B .- State of trade, fair; prospects, fair; composition on morning and evening papers, 28 cents; job printers, per week, \$9. Nearly all the bookwork is done by weekly hands, as is also the composition on evening papers. We seldom have any change in the business in St. John; that is, any vital change which throws numbers of printers out of employment. We always have enough available for the

St. Joseph.-State of trade, very good; prospects, good; composition on morn ing papers, 32 cents; evening, $27\frac{1}{2}$ cents; bookwork, 35 cents; job printers, per week, \$15 to \$18. Our advice to "square men," is to keep away from this place.

St. Louis.-State of trade, very dull indeed; prospects, nothing in view before March; composition on morning papers, 40 cents; evening, 35 cents; bookwork, 40 cents; job printers, per week, \$18. Our advice to traveling printers is, accept of work in the country towns, avoiding the cities for the present, as the number of men seeking work is far in excess of any prospective demand here. The Post-Dispatch is still non-union, although efforts are being made to bring it within the fold

St. Paul.—State of trade, dull; prospects, no better; composition on morning papers, 38 cents; evening, 35 cents; bookwork, 35 cents; job printers, per Trade seems to be dull all over the country, and printers out of employment should try some other business

Syracuse.-State of trade, fair; prospects, good; composition on morning cents; evening, 28 cents; bookwork, \$13 per week; job printers, \$13 per week. Think things will be brisk here in the spring, but printers are certainly not needed here at present.

Terre Haute.—State of trade, not very good; prospects, less favorable; composition on morning papers, 30 cents; evening, 25 cents; bookwork, 30 cents; job printers, per week, \$12. We have at present more resident printers than there is work for. We have only one paper in the union; the other two are paying under the scale.

Topeka.-State of trade, somewhat improved; prospects, better outlook; com position on morning papers, 30 cents; evening, 25 cents; bookwork, \$15 per week; job printers, \$15 per week. This town is only about half organized. Efforts are now being made to remedy this evil. Plenty of printers here already.

Washington .- State of trade, good; prospects, better; composition on morning papers, 40 cents; evening, 40 cents; bookwork, 40 cents; job printers, per reek, 40 cents per hour. Outside of the G. P. O. the business can't be relied on. Everything seems to be working harmomiously

Wheeling .- State of trade, not very brisk; prospects, not flattering; composition on morning papers, 35 cents; evening, 30 cents; bookwork, 33½ cents; job printers, per week, \$15. No difficulty, but keep away from Wheeling.

Wilkesbarre .- State of trade, fair; prospects, bright; composition on morning papers, 30 cents; evening, 25 cents; bookwork, 30 cents; job printers, per week.
\$12 t3 \$14. Subs are sure of two or three nights' work a week. Our new scale of prices has not been presented yet to the union, but will be by the new year, There is no existing difficulty.

Wilmington, Del.-State of trade, better, but still in a bad condition; prospects, medium; composition on Sunday morning paper, 35 cents; evening, 25 cents; bookwork, 20 and 25 cents; job printers, per week, \$10 to \$12. The Morning News compositors are still out, and they have no idea of returning, even if the scale was restored, as they have started a cooperative morning paper, called The Times, which is meeting with much success.

TO NEWSPAPER PUBLISHERS.

For Sale, a large Four-Cylinder Hoe Rotary Press, No. 2. Capacity, 10,000 copies an hour. The Turtles for a nine-column paper, also Tables and a large number of Cut-Column Rules, Brass Galleys, and everything complete for a first-class newspaper, go with it. The Press is in excellent order.

JOHN H. TAGGART & SON, Taggart's Sunday Times, 819 Walnut Street, Philadelphia, Pa.

Prouty Presses.
Central Type Foundry. SPECIAL AGENTS {Holly Wood Type.
Boston Type Foundry.

THE UNION TYPE FOUNDRY.

Type and Brass Rule,

PRESSES AND PRINTERS' SUPPLIES.

54 and 56 Franklin Street,

TELEPHONE 1040.

-CHICAGO.

A complete stock of Boston and Central Type Foundries' Beautiful Faces con-stantly on hand,

OFFICE OF "PRINTERS' CABINET."

"PEERLESS" ROLLER COMPOSITION

S. P. ROUNDS, Jr. & CO., PRINTERS'

Furnishing Warehouse,

ELECTROTYPING AND STEREOTYPING,

Nos. 186 and 188 Fifth Avenue, CHICAGO.

Roller Composition, either in Bulk or Rollers cast to suit press. Estimates cheerfully furnished.

S. P. ROUNDS, JR.

A. WAGENER.

THOMAS FOX, Pres't & Treas. GEO. B. Fox, Secretary.

GEO. N. FRIEND, Vice-Pres't.

Friend & Fox Paper Co.

BOOK, COVER, NEWS, WRAPPING, ROOFING AND CARPET FELT. CINCINNATI AND CHICAGO.

153 WABASH AVENUE, CHICAGO.

Lockland Mills, Crescent Mills, Rialto Mills.

THE-

Cincinnati Type Foundry,

TYPE, PRESSES.

AND PRINTERS' TOOLS OF ALL KINDS.

ALL GOODS FIRST-CLASS, AND AT PRICES TO SUIT THE TIMES.

Send for Specimens and Special Prices.

CHAS. WELLS, Treas.

201 VINE ST., CINCINNATI, O.

VANDERBURGH, WELLS & CO. TYPE AND BORDERS, Materials, Presses and

WOOD TYPE, CABINETS, STANDS, ETC.

TURKEY BOXWOOD AND OTHER ENGRAVERS' MATERIALS AND WOODS

PRINTERS' "STRONG SLAT" CASES.

110 Fulton and 16 & 18 Dutch Streets, NEW YORK.

FACTORY: PATERSON, N. J. N.B.-Machinists' Pattern Letters.

SUPERIOR

PRINTING INKS.

THE ULLMANN & PHILPOTT MFG. Co.

Nos. 56 and 58 Merwin, Corner of West Street, CLEVELAND, O.

FOR SALE BY

GUSTAV HINSTORFF, 48 Dearborn St., Chicago, Ill. GUSIAV HINS TOREF, 48 Dearoorn St., Unicago, III.
ST. LOUIS TYPE FOUNDRY, Third and Vine Sts., St. Louis, Mo.
KANSAS CITY PAPER CO., 420 West Fifth St., Kansas City, Mo.
ROBERT ROWELL, Third Ave. and Market St., Louisville, Ky.
H. B. PARKER, Cass and Congress Sts., Detroit, Mich. CLEVELAND PAPER CO., 128 St. Clair St., Cleveland, O.



F. P. Elliott & Co. 208 & 210

Randolph Street,

Chicago.

Manufacturers and Dealers in all kinds of



CARTER & BARNARD,

BLACK AND COLORED

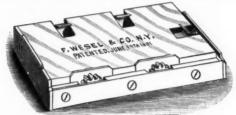
PRINTING INK MAKERS,



116 Monroe St. CHICAGO.

We are the only firm in the city who manufacture a full line of

Black and Colored Inks.



IMPROVED PLAIN OLD STYLE BLOCK WITH PATENT END HOOK.

The above cut represents our PATENT STEREOTYPE BLOCK which is well known all over the United States and Canada. During the year 1883 we furnished 2828 blocks.

nished 2828 blocks.

F. WESEL & CO.

Manufacturers of Brass and Steel Rules, Brass Dashes, Patent Stereotype Blocks,
Brass Galleys, Galley Racks, Proof Presses, Proof Rollers, Wrought
Iron Chases, McGill's Patent Chases, etc. etc.

11 Spruce Street.

NEW YORK.

Bradner Smith & Co.

Manufacturers of and Dealers in

BOOK,

SPECIALTIES.

"CLIMAX" BLOTTING, WESTON'S LEDGER, CRANE'S BOND.

CRANE BROS.' "ALL LINEN"

AND "JAPANESE" LINEN FLATS,

"SCOTCH LINEN" LEDGER,

GERMANIC FLATS, HURLBUT FLATS, WESTLOCK FLATS.

SEND FOR SAMPLES AND PRICES.

BRADNER SMITH & CO. CHICAGO.

QUEEN CITY

PRINTING INK

COMPANY,

CINCINNATI, O.

MANUFACTURERS OF

PRINTING . INKS

NEWS, POSTER,

BOOK AND JOB INKS

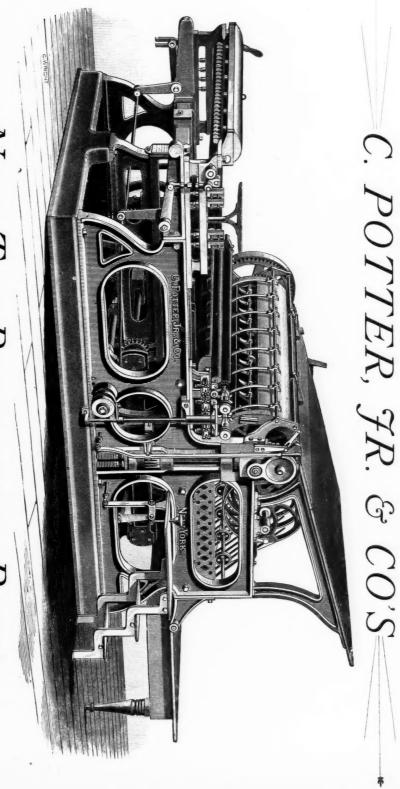
COLORED INKS AND VARNISHES.

THE STANDARD WESTERN INKS.









NEW TWO-REVOLUTION PRESS

Patented Cut Bed Rack, etc. etc. With Patented Cylinder Lifting and Adjusting Mechanism, three Tracks, or Ways, Patented Backing up Motion, Patented Air Piston,

Send for new Illustrated Catalogue showing Improved Lithographic, Two-Revolution, Combination and Drum Cylinder Presses.

OFFICE: Nos. 12 & 14 SPRUCE STREET, NEW YORK.

Western Agents, H. HARTT & CO., 162 Clark Street, CHICAGO

R. HOE & CO.'S

PATENT

Lithographic . Power . Press.

Since we first constructed this machine there have been many improvements made upon it. These have been patented from time to time.

No expense is spared to make it as perfect as possible.

Among other things, we lately altered the cam motion, so that the speed is increased about 25 per cent. without detriment to the press or quality of work turned off by it.

Experience has shown that these machines are not only the most speedy, accurate and reliable, but the most economical in the end. The fact that those made by us twenty years ago are still in operation and doing as good work as ever, is the best proof of their superiority.

The stone is adjustable from on top.

The patent clamp causes the impression cylinder to stop without jar and stand without tremor.

The pressman has perfect control of the machine by means of a brake worked by foot.

The damping apparatus is automatic and the quantity of water can be regulated while the press is working.

A special feature of this machine is the patent delivery cylinder, which takes the sheets from the impression cylinder, and transfers them to the self-acting sheet-flyer with perfect certainty and without smutting.

The bed can be run once, twice or three times to each impression, and will also roll any number of times without the impression, thus securing a thorough distribution of ink.

NEWLY REDUCED PRICES.

No.	Size of stone.	Size of design.	Rollers covering form.	Price.	No.	Size of stone,	Size of design.	Rollers covering form.	Price.
I	22 x 28 in.	20 x 26 in.	4	\$3,900	31/2	31 x 451/2 in.	29 x 431/2 in.	6	\$5,500
2	25 x 331/2 in.	23 x 31 1/2 in.	6	4,400	4	33 x 47 in.	31 x 45 in.	6	6,000
3	20 X 41 in,	27 x 39 in.	6	5,000	5	37 x 53 in.	35 x 50 in,	6	6,750

The prices include boxing and shipping, or putting up in New York; also, apparatus to roll twice, two sets rollers, counter-shaft, hangers, driving pulley, and two cone pulleys go with each machine. The rollers varnished when desired without extra charge.

DIMENSIONS, WEIGHT, SPEED AND POWER.

No.	Length.	Width over all.	Height.	No.	Weight boxed, including steam fixtures.	at which the presses can be run to advantage.	Horse, power.
1	13 ft. 5 in.	7 ft. 2 in.	5 ft. 5 in.	1	About 5 tons.	1310	1/2
2	15 ft.	7 ft. 7 in.	6 ft.	2	About 71/2 tons.	1200	5/8
3	16 ft.	9 ft. 10 in.	7 ft.	3.	About 91/2 tons.	1100	3/4
31/2	16 ft. 5 in.	to ft.	7 ft.	31/2	About 10 tons.	1100	7/8
4	18 ft.	10 ft. 6 in.	7 ft. 8 in.	. 4	About 121/2 tons.	1000	1

PRICES OF MOLLETON CLOTH, ETC.

Best quality molleton for lithographers' rollers, 30 inches wide.\$1 50	Thick flannel, 30 inches wide
Best quality molleton for lithographers' rollers, 60 inches wide. 2 25	Thick flannel, 60 inches wide 7 25
Mole-skin an inches wide	Thin flannel 60 inches wide

R. HOE & GO., 504 Grand Street, N.Y.

Also at 199-201 VAN BUREN ST., CHICAGO, TUDOR ST., LONDON, E. C., ENGLAND.

Maximum speed

di

R